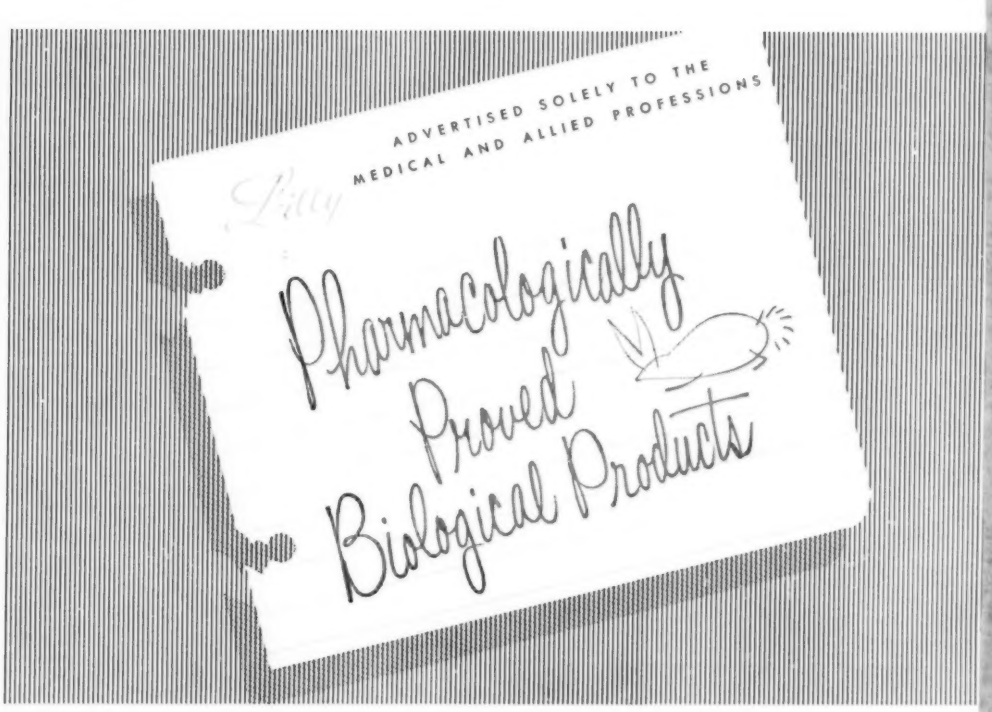
Arizona Medicine

Journal of

ARIZONA MEDICAL ASSOCIATION



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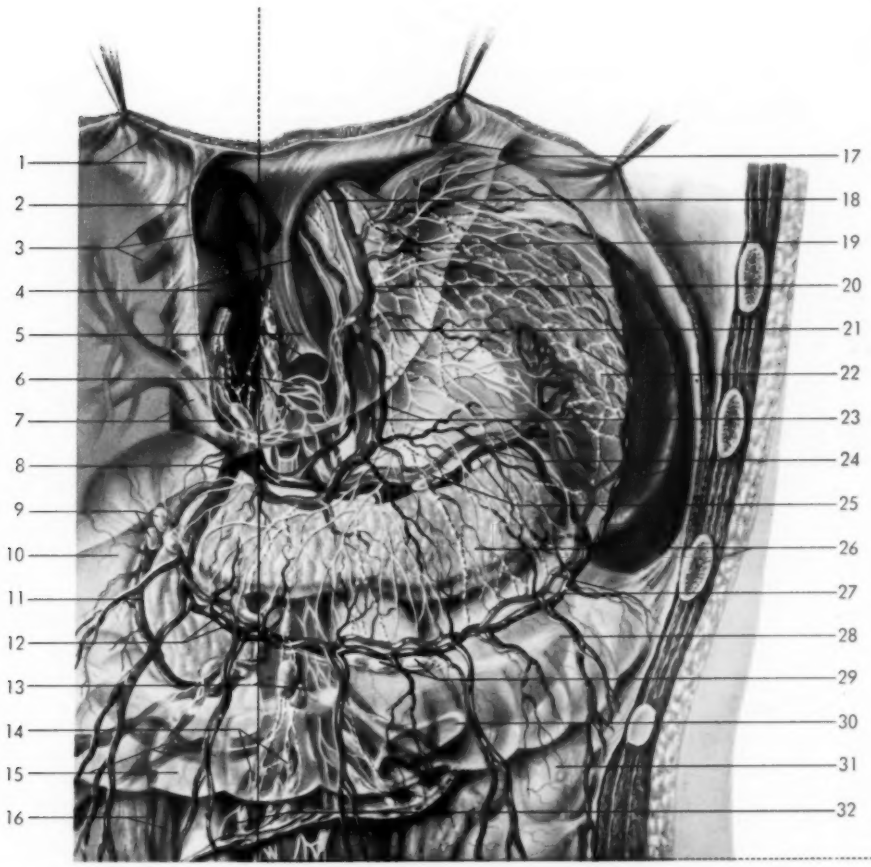
Upper Left Quadrant of the Abdomen



1 Diaphragm and coronary ligament
2 Falciform ligament
3 Hepatic veins
4 Inferior vena cava and right vagus nerve
5 Crus of diaphragm and abdominal aorta
6 Celiac artery and celiac plexus
7 Hepatic artery and portal vein
8 Gastroduodenal artery and vein
9 Subpyloric lymph nodes
10 Duodenum
11 Superior pancreaticoduodenal artery and vein
12 Right gastroepiploic artery and vein
13 Superior mesenteric artery and vein
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16 Spermatic artery and vein
17 Left triangular ligament and left lobe of liver
18 Esophagus and left vagus nerve
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20 Esophageal branch of left gastric artery and vein
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26 Pancreas and tenth rib
27 Left gastroepiploic artery and vein
28 Left kidney
29 Inferior gastric lymph nodes
30 Jejunum
31 Descending colon
32 Ileocolic artery and vein

This is one of a series of paintings for Lederle by Paul Peck, illustrating the anatomy of various organs and tissues of the body which are frequently attacked by infection, where aureomycin may prove useful.

Lederle

ARIZONA MEDICINE

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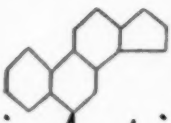
The symbol SCHERING denotes leadership in steroid hormone  research and manufacture -- including Cortogen in the most useful clinical forms. For systemic therapy, use Cortogen tablets  or injection . For eye  disorders use Cortogen ophthalmic suspension -- sterile  . The Schering seal  appears on each tablet and package -- your assurance of quality.

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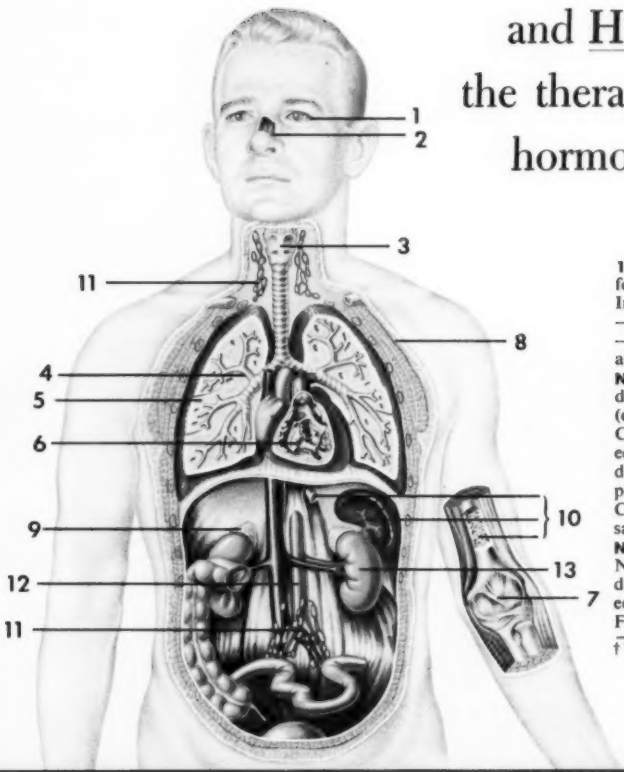

Primary Sites of Pathology and Indications

1. EYE—Inflammatory eye disease. **2. NOSE**—Intractable hay fever. **3. LARYNX**—Laryngeal edema (allergic). **4. BRONCHI**—Intractable bronchial asthma. **5. LUNG**—Sarcoidosis. **6. HEART**—Acute rheumatic fever with carditis. **7. BONES AND JOINTS**—Rheumatoid arthritis; Rheumatoid spondylitis; Acute gouty arthritis; Still's disease; Psoriatic arthritis. **8. SKIN AND CONNECTIVE TISSUE**—Pemphigus; Exfoliative dermatitis; Atopic dermatitis; Disseminated lupus erythematosus; Scleroderma (early); Dermatomyositis; Poison ivy. **9. ADRENAL GLAND**—Congenital adrenal hyperplasia; Addison's disease; Adrenalectomy for hypertension, Cushing's syndrome, and Neoplastic diseases. **10. BLOOD, BONE MARROW, AND SPLEEN**—Allergic purpura; Acute leukemia† (lymphocytic or granulocytic); Chronic lymphatic leukemia.† **11. LYMPH NODES**—Lymphosarcoma†; Hodgkin's disease.† **12. ARTERIES AND CONNECTIVE TISSUE**—Periarteritis nodosa (early). **13. KIDNEY**—Nephrotic syndrome, without uremia (to induce withdrawal diuresis). **14. VARIOUS TISSUES**—Sarcoidosis; Angioneurotic edema; Drug sensitization; Serum sickness; Waterhouse-Friderichsen syndrome.

† Transient beneficial effects.

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ARIZONA MEDICINE
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Presidential Address*

EDWARD M. HAYDEN, M.D.

The occasion today of being formally declared President of your Association gives the speaker an opportunity to talk of things he has been dwelling on in thought for several years. Mention of these here it is hoped may cause some to pause and reflect on these and similar thoughts.

In recent years it has been customary at such an occasion to speak on the trend toward socialized medicine and similar forces of evil that disturb us from without. Today I would like to deviate a little from custom and present a few notions on self-improvement within the profession. This paper therefore will be an appeal for the preservation of the dignity, morality, and intelligent tolerance of the medical profession. As physicians we are individualists, but certain basic concepts should be acceptable to all of us.

It has been my good fortune to serve in various capacities on hospital staffs, in my own Pima County Medical Society, in your House of Delegates, and for the last two years on the Council of your Association. These various offices have permitted me more closely, perhaps, to observe the impact of recent social and economic changes on the practice of medicine, and to worry a little that the pressure of the changing times may lead us temptingly along the road of social reformers, with a lessened inclination to our responsibilities. It would seem that many high school students now contemplate a career in medicine with their eyes more closely focused on the dollar than on idealism. They think of a fairy-land of strict specialization in a fanciful field where a few hours of work a day for a few months a year will return a substantial income and give much time for pleasure. Our recent graduates of medicine seem more interested in the wealth of a community than in its needs for a physician. The younger men of today lack the experience of the thirties, when consulting a physician was a luxury one could afford only in serious illnesses. The ulcers we had then were few and were certainly not caused by the pressure of overwork and high taxes. It is rare today that a young man is starved out of a Community and has to make a lesser choice. Rather it is difficult for supply to keep up with the demand for young men fresh from internships and residencies. A good physician is worthy of a good income, but profit should be of secondary consideration. One should first of all derive his satisfaction from the care of the sick and

*Delivered by Dr. Edward M. Hayden, President of the Arizona Medical Association, Inc., at the Annual Meeting of the Association at Tucson, Ariz., Apr., 1953.

injured, and the pleasures of the mind that go with work well done.

It is difficult as one passes from year to year within the profession to tell how much the profession gains or loses in public estimation, and to compare internal conflicts from one decade to another. Perhaps long relationship with the profession may make one hypercritical of faults which crop up here and there that are detrimental to our interests as a whole, or we are becoming more conscious of the need for closer cooperation. In looking back it would seem that there is much less factionalism now than in the competitive thirties, and we have gained from this closer kinship. Certainly the demands for socialization of medicine caused us to lose stature. We were placed in the category of public servants who could be ordered about, legislated against, drafted into military service, and generally told what we might and might not do. Fortunately, counter-acting forces were simultaneously at work. The public was taking a keen interest in health for the first time, nurtured by excellent articles in newspapers and magazines on various disease conditions, and voluntary sickness and accident insurance programs received widespread utilization. Our own action against these forces was not of positive character. We owe much to our lay friends and the press. A gratifying observation has been the relative rarity with which complaints have been registered against our membership in our county and state grievance committees from a public now aware that such committees exist; and that when complaints of a serious nature are made, there are not infrequently several against one individual.

The dignity of the medical profession impressed me as a growing boy in Wisconsin. We seldom called a physician except in a real emergency, and I would judge there was probably one physician for every 4,000 population. When he came it was usually as an awe-inspiring human smelling of tobacco and iodoform, who soon restored calm to an hysterical household, an educated man who was highly respected and who had a mysterious knowledge of Latin and pills, who still drove the prettiest horses and carriage while others were experimenting with automobiles. My mother was the neighborhood consultant and occasional widwife, without pay except gratitude. She owned her own home "doctor-books", and despite her limited schooling had a remarkable insight for the serious conditions, and was prompt in calling a physician when needed. She was quick to defend him if a mother died in eclampsia or a youngster died of "blood-poisoning." Perhaps because of her feeling that physicians ranked with the clergy two of her sons became doctors of medicine. Our family general practitioner was a gruff-spoken but kindly man, who never to my knowledge sent out a bill, but probably collected his fees months after at a chance street corner meeting. He never would accept a fee from a teenage youngster of one of his patients who consulted him on his own for some minor worry, but was free with advice. As I progressed in my medical education he continued to give me fatherly advice, and I shall always owe a debt to his memory. I mention these things because most of us have had experiences which directed our lives and led us into medicine. Perhaps as we deal with suffering from day to day we forget the lay feeling toward the profession, the same respect that we once felt, and we forget the dignity which we must maintain, and perhaps that is partly why we must now employ public relations experts to influence the opinion of that segment of population which is discontent.

The question of morality, or excellence in doing what is right and proper, is closely allied with dignity and tolerance. We have certain obligations to our patients, to their families, and to our fellow practitioners. To the patient these include the immediate care; a careful evaluation of his illness, including recognition of one's own lack of infallibility and a willingness to ask for necessary consultations a weighing of treatment procedures to be sure that the good accomplished will overshadow possible harm; a justifiable fee commensurate with his ability to pay without hardship; and a serious attempt to keep abreast of medical advances.

The days of astronomical fees have passed. The man who was once well-fixed on an income over $10,000.00 a year now has not enough left after taxes to pay fees in the thousands for an ordinary surgical procedure or short medical illness. He can afford to pay more than the laborer or white-collar worker, who is usually protected by insurance of some type. It is rightfully recommended by your grievance committee that the patient be fully acquainted with all expense his illness may entail before surgery or pro-

tracted medical care is begun, to avoid misunderstanding later. The changing times, again, have forced us into being businessmen as well as physicians in order to meet overhead. In regard to the incurably ill, we are not morally obligated to prolong life while at the same time draining the finances of the remaining members of the family. Families will sometimes insist that everything possible be done, and should be informed of the needless sacrifice they are making. As our surgical and medical skills increase we find ourselves able to keep a patient alive in a vegetative condition for months or perhaps years on end, a condition to be deplored, as some one has said, as "meticulous uselessness." In geriatrics we are not obliged to put a patient whose days are numbered on an uncomfortably rigid regimen, with abstinence of all his small pleasures, so that he may live unhappily to the end. In pediatrics we are correcting many congenital abnormalities incompatible with life, but in some cases perhaps we are producing mental cripples from our handiwork. In our minds we should weigh the thought, are we doing these things for self-glorification or for the good of the patient and his family? And we should be frank with the family. The problem of what is right and proper is not one-sided, of course. The patient has obligations to his physician. He must be honest in presenting his history, faithful in carrying out recommended treatment, and truthful in estimating his ability to pay.

Tolerance is defined as the disposition to tolerate beliefs, practices, or habits differing from one's own. It is a quality that comes with maturity and the mellowness of age, but can be acquired by the young. The attribute of tolerance does not imply that we must be blind to all that is bad in our fellowmen. We should, however, be able to weigh the bad with the good, and not be too quick to pass judgment. Legal actions too often stem from a momentary expression of intolerance, when on impulse we make a critical remark against a patient's former physician. That physician may be doing more real good for more people than we are, but because of a difference in opinion or in training we may be tempted sharply to condemn him without hearing. Perhaps the patient has not presented us with all the facts but has maneuvered them about so as to cast a bad light on a former physician. When we disagree we should do so tactfully, so as to assure the patient that there may be many ways of accomplishing the same result, but that we prefer our own. Occasionally our referred patients tell us they left a certain doctor because he belittled their previous physicians whom they still held in confidence and esteem. In its way, that is poor public relations. The patient is entitled to a physician in whom he has confidence, and if it is our sincere belief that he has selected a harmful practitioner we must subtly replace the harmful individual in a way that is gentle and that does not cause too abrupt a rupture of his ties. Discrediting another individual implies in the patient's mind that you think him stupid for having made such a selection. Patience is a quality which helps to develop tolerance. I think the physicians we respect the most are those who are big enough to be patient with their colleagues, and with the personnel of their own offices, those of their associates, and those of the hospitals.

These comments do not mean that we should be philosophical to the extent that no steps should be taken to protect the public from fraudulent irregular practitioners or from physicians guilty of grossly unethical conduct. When a serious charge involves a member of our own profession the proper committee in your county society or state association should be informed.

Much can still be done further to promote the dignity, morality, and tolerance of the medical profession. Our various associations and specialty groups are busy writing and revising codes of ethics, but when finished these codes do not get down to the medical students and residents in specialties soon enough to prevent fixed patterns of thought and habit. Our medical educators should be encouraged to include separate instruction courses on ethics and customary procedure in curricula. And perhaps our own Association, working through our State Board of Medical Examiners, may some day be able to give each newly licensed doctor of medicine the information he needs to help him know what is expected of him in Arizona.

Original ARTICLES

TUMORS OF THE MEDIASTINUM

David State, M.D., F.A.C.S
Phoenix, Arizona

Introduction

Chest X-ray surveys of our adult population have brought to light not only silent lesions of the lung but also hithertofore unsuspected tumors of the mediastinum. Now that a significant number of these neoplasms have been removed surgically, it has become possible to determine their true nature, with particular regard to their life history, incidence of malignant transformation and predilection for certain anatomic sites within the mediastinum. With this newer knowledge, it has become possible to recommend appropriate forms of treatment.

The purpose of this paper is to review briefly the common tumors of the mediastinum and to present one patient whose clinical history emphasizes the problems of diagnosis and therapy.

Anatomic Considerations

The mediastinum is divided into 4 compartments.

1. Superior mediastinum extends from the thoracic inlet to an imaginery line extending from the angle of Louis posteriorly to the body of the fourth thoracic vertebra. The remaining compartments lie inferior to this line and are further subdivided into:

2. The anterior mediastinum, which is bound anteriorly by the undersurface of the sternum and posteriorly by the heart.

3. The middle mediastinum may be considered the visceral compartment, for it contains the heart and the major vessels coming to or leaving that organ, as well as the trachea, esophagus and associated lymph nodes.

4. The posterior mediastinum is bound anteriorly by the esophagus and posteriorly by vertebral bodies. Within this area run the spinal and sympathetic nerves, which emerge from the intervertebral foramens.

Pathology

The common tumors in the above described compartments are: (1) Superior mediastinum—a. goiter, b. bronchogenic cyst, c. parathyroid adenoma. (2) Anterior mediastinum—a. thymoma, b. teratoma, c. goiter. (3) Middle mediastinum—a. bronchogenic cysts, b. lymphoblastoma, c. pericardial cyst. (4) Posterior mediastinum—a. tumors of neurogenic origin, b. fibrosarcoma, c. lymphoblastoma.

Tumors of unquestioned benignancy, or malignancy, such as bronchogenic cyst, fibrosarcoma and lymphoblastoma, present no real problem from the standpoint of their ultimate course. However, the true nature or incidence of malignant degeneration of three common mediastinal tumors, thyoma, teratoma, and neurogenic tumors, has only recently become better known and it would be worthwhile to emphasize the following facts concerning these tumors.

(1) Thymoma—approximately 75% of thymomas are malignant. Histologically it may be impossible to differentiate those that are benign from those that are malignant.

(2) Dermoids or teratomas—11-20% become malignant.

(3) Neurofibroma—approximately 40% are, or become malignant.

It should be pointed out, that even those tumors which are benign histologically may, by their continuous growth and compression of vital structures, finally cause the death of the host. In this respect mediastinal tumors resemble intracranial tumors.

Symptoms

All tumors of the mediastinum whether benign or malignant, may produce identical symptoms, for the difficulties the patients experience are those due to pressure of the tumor on structures of the chest. The severity and rapidity with which symptoms occur are related primarily to the rate of growth of the tumor. The common findings are therefore pain in the chest, cough, dyspnea, hoarseness, dysphagia and symptoms of venous compression. If the tumor is small and produces no compression the patient will experience no symptoms at all.

Diagnosis

To date the majority of these tumors have been chance findings in X-rays of the chest, taken on

Read before the Staff Meeting of Memorial Hospital, November 17, 1952.

apparently well individuals. Plates taken in the P A and lateral projections usually establish the fact that the tumor is in the mediastinum and also informs the physician in which anatomical compartment of the mediastinum the tumor is situated. The patient should also receive fluoscopic examination to determine the presence or absence of pulsations of the tumor and if any question of the vascular nature of the tumor exists (ie aneurysm) angiocardiography should be employed. The presence or absence of calcification within a mediastinal tumor should be sought for, because its presence usually points to a teratoma, or mediastinal goiter. Calcification of the wall of an aneurysm arising from the ascending portion of the aorta should suggest the possibility of a luetic origin. If the neoplasm arises in the posterior mediastinum, detailed pictures of the spine in this region should be taken to determine the possibility of intraspinal extension of the tumor. In rare cases it may be necessary to do a diagnostic pneumothorax to elicit the true nature of the tumor. If a tumor is solitary and unilateral, the chances are it is benign; conversely, if the tumor causes bilateral widening of the mediastinum, it is most likely malignant (ie. lymphoblastoma).

Treatment

All patients with mediastinal tumors should have them removed surgically. The exceptions to this rule are (a) a poor risk patient, with the increased risk being due to some pathological state other than the mediastinal tumor (b) if a diagnosis of fusiform aneurysm of the ascending aorta is made and the patient is asymptomatic, (c) if a diagnosis of malignant lymphoblastoma can be made by biopsy of readily available lymph nodes. In these cases radiation therapy should be given.

It may be difficult for the physician to advise surgical extirpation for a mediastinal tumor in an apparently well individual. However, if he keeps in mind that many become malignant and secondly that a benign neoplasm may cause death by continued growth, he will readily see that the welfare of his patient is best served by advocating removal. Too, the surgical mortality and morbidity are lowest when the tumor is small and diagnosed early. Routine therapeutic preoperative radiation of mediastinal tumor should be condemned. It should only be used where the diagnosis of malignant lymphoblastoma is certain. In all these cases, its use results in unnecessary delay and secondary changes due to irradiation may make surgical removal of the tumor quite difficult.

Report of a Case

The following case report highlights some of the problems of diagnosis and treatment in a patient with an anterior mediastinal mass. *Mrs. N. G., a* 62-year-old white female was admitted to Memorial Hospital, Phoenix, Arizona, on 9-14-52. She complained of dyspnea of 2 years duration. The shortness of breath had been so severe for 4 months prior to hospital admission that she was practically incapacitated. She also noted an increasing sense of pressure over the upper anterior portion of the chest. This patient did not have any cough, hemoptysis or ankle edema.

The past history was significant in that she had three previous thyroidectomies, the first in 1926, the second in 1932 and the last in 1950. The primary thyroidectomy had been for an enlarged thyroid gland with hyperthyroidism. The second operation was for recurrence of an enlarged gland and hyperthyroidism. Following this operation the patient noted hoarseness and weakness of her voice and also an inspiratory wheeze. The third operation in 1950 was primarily for dyspnea and although some gland was removed, the patient did not experience any relief. In 1944 an X-ray of the chest was taken as part of routine

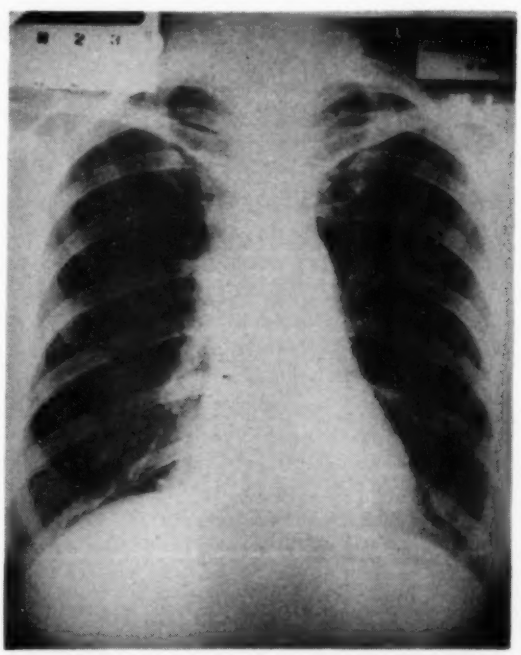


Figure 1—X-ray of chest taken in 1944. This was interpreted as negative.

pre-employment examination and the X-ray was interpreted being negative. (Fig. 1).

Examination at this hospital admission revealed a well developed, well nourished white female, who was obviously dyspneic at rest. Her voice was hoarse and she had a marked inspiratory wheeze.

The other essential positive findings were (1) Pupils reacted to light and accommodation. There were no "eye signs" of hyperthyroidism. (2) Multiple previous thyroidectomy scars, with no palpable thyroid gland. (3) Slight motion of the right vocal cord only. (Indirect laryngoscopy). (4) Inspiratory wheeze, but with good air entry into both lungs and no pulmonary rales. (5) Heart findings essentially negative. B. P. 160/90 and no peripheral edema.

1 Blood and urine essentially negative.

2 Mazzini test for lues negative.

3 Electrocardiograph—normal but showing evidence of abnormal rotation of the heart axis.

4 Venous pressure—6.0 cm. of water.

5 Vital capacity 2000 cc., with rapid expiration.

6 Walking ventilation—moderate dyspnea on walking at rate of 180 ft. per minute for 3 minutes.

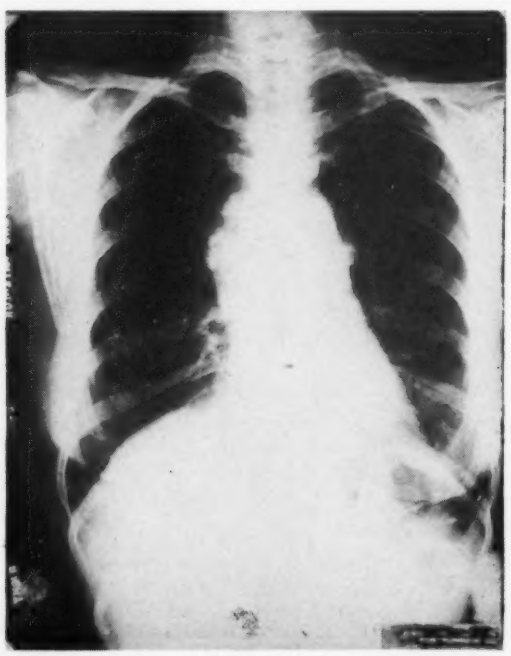
7 X-rays and flouroscopy showed non-expansile mass in the anterior mediastinum, with small areas of calcification (Fig's. 2 and 3).

It was felt that the dyspnea was definitely not of cardiac origin, but that the two components of vocal cord paralysis and anterior mediastinal masses were causative. Because of the large size of the mediastinal mass and the progression of the dyspnea, it was felt that this tumor should be removed first. The subsequent clinical course would indicate if any further surgery to improve the laryngeal airway would be necessary.

On 9-16-52 through a sternal splitting incision a large fleshy lobulated mass, measuring 8.0 cm. in diameter was removed from the anterior mediastinum. A tracheatomy was also done because of the preoperative vocal cord involvement. Postoperatively, she got along nicely and was discharged on the 7th post-operative day with the tracheotomy tube removed.

Her convalescense was gratifying. She lost the sense of deep pressure in the mediastinum and she became less dyspneic. Within a month after surgery her voice became stronger and her right vocal cord moved better, indicating that pressure on the right recurrent laryngeal nerve was at least partially responsible for the right vocal cord paresis.

The gross appearance of the tumor is shown in Fig. 4. Histologically the neoplasm proved to be thyroid tissue showing diffuse hyperplasia with



F.gure 2—P.A. X-ray of chest showing large mediastinal tumor.

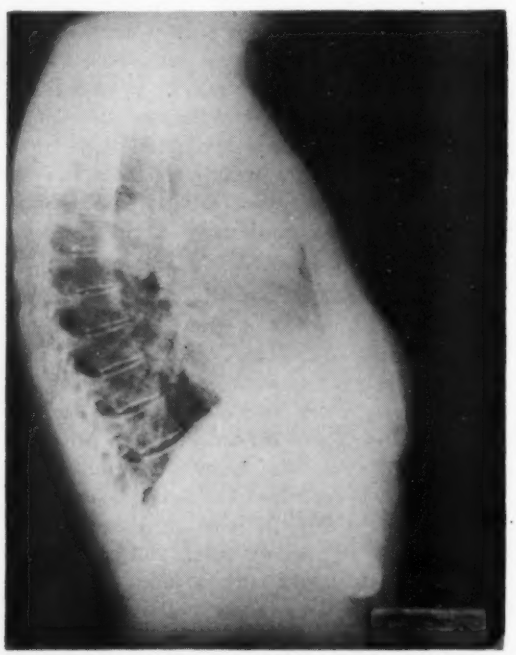


Figure 3—Left lateral x-ray of chest, showing antero-superior position of mediastinal tumor.

focal hemorrhage, fibrosis and calcium deposition.

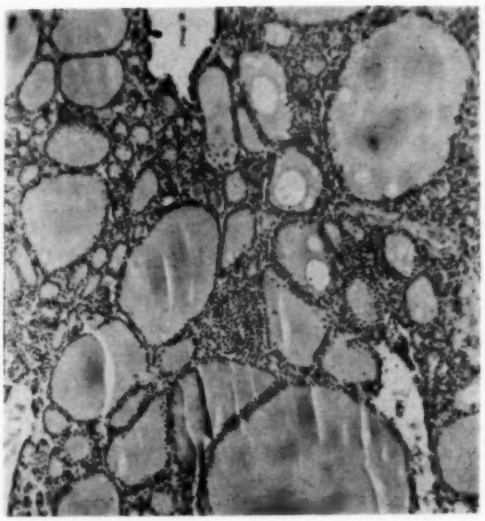


Figure 4—Histologic picture of mediastinal tumor. It presents the picture of thyroid with diffuse hyperplasia.

Summary

1 A brief review of the various types of tumors occurring in the mediastinum has been presented.

2 These neoplasms, whether symptomic or asymptomatic should be removed, because of (a) their potential malignant character and (b) the fact that continued growth of a benign tumor may cause death from compression of vital organs. The possible exceptions to this recommendation are (1) poor risk surgical patient, with the risk being due to some pathological state other than the mediastinal tumor, (2) a known case of mediastinal lymphoblastoma and (3) an asymptomatic patient with a fusiform aneurysm of the ascending aorta. (3) A case report, illustrating the clinical picture and results of an anterior mediastinal mass is presented.

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TREATMENT OF THE COMMON FORMS OF ARTHRITIS

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It is important to remember that arthritis is only a symptom and not a disease. It can be compared to fever which we know is a symptom of many underlying conditions. In the same way, arthritis may be a manifestation of any one of forty or fifty common types.

A physician is fortunate if his patient happens to have manifestations of arthritis in the hand, as the joints which are involved are excellent indicators of the type of arthritis from which the patient is suffering. It helps one to start off with a pretty good answer concerning the diagnosis. For instance, the hand in rheumatoid arthritis characteristically shows involvement of the proximal interphalangeal joints and the metacarpal phalangeal joints, as well as swelling of the ulnar side of the wrist. Also, there may be fluid present in any of these involved joints and in the tendon sheaths on the back of the hand. In osteo-arthritis it is the distal interphalangeal joints which may be involved and in about ten per cent of the cases they will have involvement of the proximal interphalangeal joints. In no cases are the metacarpal phalangeal joints afflicted. Also, none of the points of osteoarthritis have fluid.

The treatment of rheumatoid arthritis is as varied as there are numbers of physicians treating the disease. It is necessarily so, because we do not know the etiology or cure, and each patient is an individual problem. The following plan is one carried out in the treatment of approximately four thousand patients suffering with rheumatoid arthritis seen over the past twenty years.

1. Complete bed rest for a period of at least three weeks. This is best carried out in a hospital or nursing home. It amounts to a period of education as well as intensive treatment under close supervision. There are so many factors involved that a physician should see these patients many times in order to establish satisfactorily the ideal plan. Also, the patient can be given good treatment and training in the Physical Therapy Department.

The bed should have a firm mattress such as a felt or hair mattress or a 5/8" plyboard placed under an innerspring or rubber mattress. The plyboard should not be placed under the hair or felt mattress as it would make it too hard. A pil-

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low or rolled-up blanket should be put under the covers at the foot of the bed, so that the bedclothes will not press down on the toes. One pillow for the head is all that should be used. However, the patient may sit up in bed for three-quarters of an hour three times a day while eating meals and three other times a day for a welcome change of position. Every hour on the hour, the patient should push aside the pillow from under the head and take a series of six or more deep breaths. This encourages a person to maintain a straight spine. No patient benefits by having a number of pillows tucked under the head and shoulders as it tends to produce a curvature and certainly keeps down pulmonary ventilation.

It might seem advisable to prolong the rest until the activity of the rheumatic process subsides, which may go on for several months. Then the patient is encouraged to get out of bed gradually and sit in a proper type of chair for increasing periods. Gradually walking is introduced, using good arches.

2. Infra-red heat. Using the the common 250 watt infra-red bulb, 15-20 minutes, two or three times a day at a distance of thirty inches helps to produce vasodilatation and a sense of pain relief to the affected joints. The heat should not be any closer than thirty inches even though many patients do not think enough heat is produced.

3. Aspirin or sodium salicylate are the best drugs for relief of pain, using 0.6 gm. four times a day. At no time should codeine be used as it produces mental irritability and constipation which complicate an already serious situation.

4. Iron in some form is advisable as most patients have a mild anemia. However, in many cases it does not help and it may be necessary to give several blood transfusions.

5. A vitamin preparation of some type should be prescribed from the beginning as most patients feel that it is an important part of therapy. If the physician does not suggest it, the patient always ends up by taking some anyway.

6. Gold in the form of myochrysine or solganol is an effective means at our disposal today to help keep down the spread of this form of arthritis. Myochrysine, being a water-soluble form of gold, is easy to handle. It is given at weekly intervals using a ¾" 24-gauge needle, injected into the deltoid muscle. Start with 10 mg. the first week; 20 mg. the second week; 30 mg. the third week; and 40 mg. the fourth week. Continue using 40 mg. each week until a total dose of 500 mg. has been given. At that time, a decision must be reached as to whether or not it should be continued. If the patient seems to tolerate the drug well, it may be continued for another six to eight weeks. Or, if the patient has done well, the time interval may be increased so that 40mg. every three weeks is used. There are several toxic manifestations which must be watched for. The most common symptom is glossitis. Next in frequency is dermatitis. Purpura is the one serious complication which must be looked for at each visit. There are a great many other rare complications which might occur. If the complication is mild, merely stopping the drug is sufficient. But if it is severe, BAL must be used. During the course of the use of the gold, urinalysis and complete blood count, including platelet count, must be done every three weeks. The platelets are usually first affected if a person is sensitive to gold.

7. No patient with rheumatoid arthritis should be allowed to sit in a lounging davenport or chair, but should use an occasional-type or straight-back chair.

8. Straight spine is most important. Therefore, every hour on the hour the patient should be instructed to stand up and take several deep breaths. It calls the attention of the patient to the fact that the spine should be straight.

9. Although there are many people who feel that vaccine is of no value, it is my feeling that small doses, such as 4,000,000 organisms, of hemolytic streptococcic vaccine given subcutaneously at weekly intervals is of help as part of treatment. When given in this amount, no reaction occurs. It is useful in an out-patient department where there are so many patients requiring treatment, they cannot be watched carefully enough to give gold or other reaction-producing agents. In a trial with one hundred patients who had been on weekly injections of vaccine, normal saline was substituted unknown to any of the group except the author. Within six weeks, these patients were in more pain and many of them were so restless that sedatives were necessary. Many more prescriptions were written for relief of pain while these people were on the placebo injections. At the end of three months, again vaccine was used with definite improvement in most patients. Naturally, as the only form of treatment, vaccine by no means fills this order, but is is a useful adjuvant.

10. The mental attitude is extremely important.

These patients should never be misled as to what can be done. There are always favorable changes which can be discussed with the patient at the time of each visit. The family should be cognizant of the seriousness of this type of arthritis and encouraged so that a favorable attitude toward the patient can be maintained. Psychotherapy in many of these people is as important as any part of treatment.

11. Cortisone and ACTH afford relief of signs and symptoms in almost all patients to a varying degree. However, the progress of the disease continues despite constant administration of either. But, there are many cases where either should be given; especially to children suffering with juvenile rheumatoid arthritis; to those who have a severe exacerbation from time to time; to those who need more help for rehabilitation; and to that group where it is absolutely necessary for a wage-earner to continue on the job. It is practical to give it if the patient responds favorably to small amounts. That is, 75 mg. of cortisone or less per day, or a comparable amount of ACTH. The dosage of ACTH is not given here because newer purified forms are becoming available. The side effects which must be looked for are Cushing's syndrome, elevated blood pressure, elevated blood sugar, occurrence of ulcer and coronary disease, fluid retention and increased mental stimulation. Then, when it is stopped, withdrawal symptoms must be controlled. To my knowledge, cure of rheumatoid arthritis has not been effected by either substance.

12. Recently, Hydrocortone has become available for local use in painful, swollen joints of rheumatoid arthritis or osteoarthritis. It is also available in very limited amounts for systemic use. The beneficial effects can be obtained with lower doses than with cortisone, and with fewer side effects.

OSTEOARTHRITIS

Osteoarthritis is a degenerative type of arthritis affecting the neck, spine, fingers, knees and hips.

1. Inasmuch as 90 per cent of patients are overweight, a first suggestion for treatment is reduction. This can be done either by giving a very low diet, such as 840 calories per day, thus allowing the patient to cheat a little and still lose a little per week. Or the patient may be instructed to eat a normal breakfast, to eat normal amounts of meat, fish or fowl, and then three quarters as much of all other things which are eaten or drunk during the day. This allows the patients to maintain their same shopping, cooking and eating habits.

2. Acid acetylsalicylic or sodium salicylate in small amounts usually gives considerable relief of pain. Codeine is not encouraged.

3. A thyroid extract, 0.06 gm. per day, helps the patient to reduce as well as to increase metabolic processes.

4. Infra-red heat. Using the common 250 watt infra-red bulb, 15 to 20 minutes, two or three times a day, at a distance of 30 inches helps to produce vasodilatation and a sense of pain relief to the affected joints. The heat should not be any closer than 30 inches even though many patients do not think enough heat is produced.

5. Paraffin baths are especially useful when there is pain in the hands. This is easy to do at home, using four pounds of ordinary canning paraffin and four ounces of mineral oil. Place in a large double boiler. When melted, at approximately 126 degrees, the hands should be dipped in and out until a thick coating of paraffin forms. Paraffin should be allowed to remain on the hands for 30 minutes, at which time it is removed and replaced in the double boiler. It should be repeated once daily.

6. If the hands are involved, no knitting, tatting or crocheting is allowed. Prolonged walks are discouraged if the back or knees are involved.

RHEUMATOID SPONDYLITIS

One should remember that the diagnosis of rheumatoid spondylitis can be made by X-ray of the sacro-iliac joints. This condition may exist years before any symptoms occur. The secret of success is to maintain a straight spine. The following plan of treatment helps:

1. The patients should wear modified Taylor back brace at all times except when in bed.

2. Deep-breathing exercises should be taken every hour on the hour, whether indoors or outdoors.

3. X-ray therapy is used for the relief of pain. It does not stop the progress of the disease.

4. Salicylates will make the patient more comfortable.

5. Muscle relaxers, such as curare or tolserol, help the patient to attain and maintain the straight posture more easily, especially in the early stages.

GOUT AND GOUTY ARTHRITIS

Acute Attack

1. Bed rest until the acute manifestations subside. Usually 48 hours is adequate. It will shorten the attack.

2. Colchicine should be used in the form of tablets, 0.5 mg. (1/120 grain), given one every hour until nausea, cramps or a loose bowel movement occurs. Then it must be stopped. If diarrhea ensues, paregoric may be given, 4 cc. (1 teaspoonful) every hour in a little water, until diarrhea ceases. The colchicine may be repeated after 48 hours in half this dosage; if therapeutic response does not seem to be satisfactory. It is best not to use the liquid preparations containing colchicine. Also, the earlier colchicine is started, the quicker and more satisfactory the response will be.

3. Local measures. Glycerin park locally over the affected joint seems to be the most effective application. It is made by pouring a small amount of glycerin between two layers of cotton. This is packed around the affected joint and left there for a period of 4 to 6 hours. In some cases, hot or cold compresses may be equally beneficial.

4. Diet—low purine, low fat and high carbohydrate during this acute phase. The substances which contain little or no purines (uric acid-forming) are milk, eggs, breadstuffs, cereals, tomatoes, onions, cheese and fruits.

5. Alcohol—best to abstain entirely.

6. ACTH, 40 mg., or cortisone, 100 mg., repeated in six hours, may be given if the colchicine does not seem to be effective promptly or in long-established severe, painful attacks. Colchicine must be given in small doses at the same time and continued for one week following.

Treatment After the Acute Attack

Inasmuch as gouty arthritis is a recurring form of arthritis, this phase is equally important.

1. Activity should be moderate in all respects. So many victims are those who are accustomed to outdoor sports that it is necessary to allow them to continue these in a modified way. However, badminton and tennis seem to provoke attacks more quickly than other forms of sports.

2. Colchicine, 0.5 mg. (1/120 grain), one to two per day as tolerated. This can be carried on for years without reaction. If an acute attack does ensue, the dosage can be stepped up to the plan outlined previously for an acute attack. Colchicine should be carried so that two or three tablets at hourly intervals can be taken immediately if an acute attack seems to be starting.

3. Properly fitting shoes are very important.

4. Diet. Low fat, moderate purine, adequate protein and high carbohydrate is the best general diet. However, the carbohydrates should be restricted if the patient is over-weight, as ideal body weight is best. The substances which should be avoided entirely are as follows: Liver, kidney, sweetbreads, herring, sardines and anchovies. Meat, fish and fowl contain approximately the same amount of purines and may be used in moderate portions four or five times weekly. It is permissible to drink tea, coffee and chocolate as desired. Purine-free foods (as outlined previously) can be eaten freely.

5. Alcohol may be used if necessary, in small amounts, preferable highballs or straight drinks, which are better tolerated. Wine, beer, ale, vermouth and champagne oftentimes precipitate attacks. That seems to be the reason so many people develop gouty arthritis during the holiday season.

6. ACTH and cortisone also are used by some patients to abort acute attacks. The program is the same as outlined previously for acute attacks. However, at this time there is no agreement among various clinics as to how effective it is. We have found it effective in 50 per cent of our patients unless large doses were used.

7. Large tophi should be thoroughly excised surgically.

Benemid is a new substance which possesses the ability to lower the blood uric acid without apparent reaction in the patient. It will lower the blood serum level about 30 per cent. Usually one to two grams is given in two divided doses daily. This is in addition to other therapy. It will not prevent the occurrence of acute attacks, but it seems to cut down the number. Also, it does not relieve an acute attack. Time alone will tell whether it will have a definite effect upon already existing tophi, or if it will prevent the deposit of uric acid in the tissues, which forms tophi. This may turn out to be a very useful addition in the treatment of gout and gouty arthritis.

From the above outline, it is apparent that each patient with arthritis must be handled as an individual problem. The majority of patients seen can be made more comfortable and many times the progress of the disease can be stopped.

PHOENIX Clinical CLUB

MASSACHUSETTS GENERAL HOSPITAL CASE NO. 29492

The Case History in this discussion is selected from the Case Records of the Massachusetts General Hospital, and reprinted from the New England Journal of Medicine. The discussant under Differential Diagnosis is a member of the staff of the Massachusetts General Hospital. The other discussants are members of the Phoenix Clinical Club.

First admission: A thirty-six-year-old American laborer was admitted complaining of pain in the chest.

About two years before entry, while lying in bed, the patient was suddenly seized with a severe pain in the left chest that radiated down the left arm. The pain lasted about four hours and was very severe. At intervals thereafter he noted a vague sensation of pressure in the chest and moderate dyspnea on exertion. About two weeks before entry he had a severe pain in the chest and left arm, which occurred during the night and lasted about an hour. The pain was less severe when he sat up, and was associated with a moderate amount of gaseous eructation. A sedative afforded relief and he was able to fall asleep. Shortly afterward he again awoke and voided a large amount of urine. On the following day he visited the Out Patient Department, where a general physical examination was said to be negative; the blood pressure was 135 systolic, 80 diastolic. A blood Hinton test was negative, and an x-ray film of the chest showed the lung fields to be clear. The heart was at the upper limit of normal in its transverse diameter and showed slight relative increase in the size of the left ventricle. The supracardiac shadow was normal, and the trachea was not displaced. An electrocardiogram was entirely negative. About a week before entry, in the afternoon while sitting at his work, the patient had another attack. This began as a sudden sensation of soreness in the left chest but was not severe enough to cause him to stop work. On the way home, however, he had a severe attack, during which he could do nothing but stand still for a minute or two. The pain at that time radiated down the left arm. He was compelled to take a taxi and on arriving home attempted to climb four flights of stairs, but was unable to do so. A physician administered some tablets that produced relief. The patient then tried to continue up the stairs but was compelled to stop frequently and finally succeeded in reaching his apartment after thirty-five minutes. He then lay down and went to sleep. The following morning he felt weak but was able to get up and go to work. During the succeeding week he had three minor attacks of chest pain and another very severe one, during which he entered the Emergency Ward. The last attack followed notification that his salary would be cut.

Examination showed a well-developed and well-nourished man lying flat in bed in no evident discomfort. There were no abnormal physical signs. The lungs were clear. The apex impulse of the heart was seen and felt in the fifth interspace in the midclavicular line. There were no murmurs.

The blood pressure was 120 systolic, 70 diastolic. The temperature, pulse and respirations were normal.

Examination of the urine was negative. The blood showed a red-cell count of 4,500,000, with a hemoglobin of 75 per cent. The white-cell count was 4800, with 71 per cent neutrophils. The stools were essentially negative. An electrocardiogram showed a PR interval of 0.16 second with normal rhythm; T_1 was low and slightly inverted, T_2 T_3 T_4 were upright, and Q_4 was present. A Graham test and a gastrointestinal series were negative.

Six days later another electrocardiogram showed a late inversion of T_1; T_2 and T_3 were upright, with a slightly high origin. The patient's condition remained good through his hospital stay, and on bed rest he exhibited no discomfort. On the twentieth hospital day another electrocardiogram showed a slightly low T_1, which, however, was practically within normal limits; T_2, T_3 and T_4 were upright, T_4 was diphasic, and Q_4 was markedly shortened. He was discharged on the twenty-fourth hospital day.

Second admission (one and a half months later.) The patient was followed in the Out Patient Department, where he complained of recurrent attacks of vague pain, always following

mild exertion. The pain occurred in the left chest and frequently radiated down the left arm. An electrocardiogram taken two weeks after discharge showed a low T_1, an upright T_4 and an M-shaped QRS_4. One and a half months after discharge he was seized with substernal pain that was much severer than usual. It lasted about an hour and was replaced by a dull constant ache in the chest and left arm. He went to sleep afterward and was suddenly awakened by a severe upper retrosternal squeezing pain even severer than the previous pain. There was an aching sensation in the left arm and jaw, and a splitting headache, and the patient was unable to lie back without aggravating the pain in his chest. He was placed in a taxi and immediately brought to the Emergency Ward.

Physical examination was again essentially negative. The heart was not enlarged but the sounds were distant in character.

The blood pressure was 110 systolic, 90 diastolic. The temperature was normal. The pulse and respirations were not recorded.

The blood showed a white-cell count of 10,000.

He continued to have substernal pain and vomited once after entry. Four hours later a few inconstant rales were heard at the bases of the lungs, but there was no change in his condition. The temperature remained normal. Although no significant change had been noted in his general condition, the patient suddenly died eight hours after entry.

DR. F. T. FAHLEN:

This case is presented with the idea of having the "discussants" accept it as one of deficiency of the coronary arterial supply, and to analyze its nature and locale.

We consider it a case of coronary insufficiency.

The history is practically airtight, and there is no other explanation for the symptoms as recorded.

For instance–there was no–

(1) Pulmonary embolus, nor atelectasis.

(2) There was no spontaneous pneumothorax.

(3) No mediastinal mass, inflammation, or emphysema.

(4) No aortic aneurism.

(5) No pleuritis, nor myositis.

(6) No neuroganglioma nor chromafin tumors.

(7) No disease of the bones, i.e. spine or ribs.

Furthermore, in the gastrointestinal tracts there were no signs of (1) esophageal lesions, diverticula, ulcer or foreign bodies; no neoplasms, nor cardiospasm (2) No hiatus hernia, (3) No pylorspasm; (4) no gallbladder pathology nor stone; (5) no pancreatitis nor renal stone; (6) no peptic ulcers. It might be said that the fatal outcome as related could not have been due to any of the above.

This sets the case of coronary insufficiency. It was in part angio-spastic (angina pectoris), but some organic coronary vascular disease, sclerotic, atheromatous, embolic or thrombolic, must have also been present. In either case myocardial ischaemia resulted–most likely leading to infarction scarring and possibly even aneurism of the ventricle.

The case record is vague, and that other coincidental pathology existed is also possible–for instance–was there also (1) an aortic aneurism near the mouth of the aorta, dissecting in nature and later ruptured? (2) was there a myocardial neoplasm, abscess or bacterial, mycotic or parasitic infection? or (3) was there a terminal cerebral accident, such as a large embolus from the area of myocardial infarction, or a massive cerebral hemorrhage from a pre-existing cerebral vascular aneurism? You will recall that the history speaks of a polyuria and a splitting headache in the terminal phases of the case.

There is obviously nothing in the story upon which to base any one of these three possibilities.

Then, too, there is nothing decisive in the record to prove coronary occlusion, for instance–

(1) No congenital heart or valvular disease

(2) No syphilis

(3) No rheumatic fever

(4) No infectious mycotic nor trophic disease, such as beri-beri, nor is there any evidence of periarteritis, nodosa, nor other collagen disease.

(5) No metallic (lead, etc.) nor other poison nor toxicity.

(6) No record of hypertension, or hyperthyroidism.

Furthermore, the physical examination was not helpful, and chiefly of a negative type. This man was a young man, a laborer, well developed and well nourished; his urine was normal, his blood pressure varied from 135/80 to 110/90, and while the latter must be considered definitely low, it was not extremely so. The blood count was essentially normal, with a slight leucocytosis, 8800 to 10,000; no sedimentation rate

is given. The blood Hinton was negative; the pulse and respiration were normal, or not given; there was no fever; there were no pericardial friction sounds and no murmurs, all of which leaves but little positive objective evidence.

Thus it becomes all the more necessary to make something of the following recorded findings:

(1) The x-ray reports the heart at the upper limits of normal in the transverse diameter;

(2) There was relative increase in the size of the left ventricle;

(3) There was dyspnea on exertion;

(4) Finally, there were distant obscure heart sounds. These must all be regarded as evidence of a deficient myocardial action;

(5) There was the electrocardiogram.

In coronary blocking or occlusion, we would expect, besides the pain, evidence of muscular weakness, and there should exist abnormal physical signs, enlargements or dilitation of the heart with changes in the character of the first sound, and with evidence of shock. Second, various murmurs; third, pericardial friction rub, not always present fourth, drop in blood pressure, fever, leucocytosis and increased sedimentation rate; fifth tachycardia, fibrillation or other arrhythmias; sixth, evidence of cardiac weakness, such as dyspnea or acute pulmonary congestion; seventh, x-rays might show irregularity in contour, contractions or bulging of one of the chambers of the heart, especially in ventricular aneurism; eighth, we should expect great and positive help from the electrocardiograph; ninth, cerebral accidents are quite common.

An enlarged left ventricle was reported by x-ray and later denied on examination.

This might indicate a dilatation, and if so, is all the more important in confirming myocardial damage.

The dyspnea reported in a young man of muscular well developed physique, cannot be overlooked, and undoubtedly means in this case deterioration of the heart muscle, as there is nothing else to account for it.

The distant heart sounds recorded in the last phase of the case could occur with a weakened heart muscle, or be the result of pericardial effusion or hemorrhage into the pericardium-cardiac tamponade.

As to the electrocardiograph in general, it may of course be of great help, and then again, worse than useless and misleading in that it may show very slight abnormality or none, even in fatal cases.

In such cases, slight abnormalities in repeated electrocardiograms are full of meaning, as I am sure will prove to be the case here.

Frequent electrocardiograms taken serially in all leads are necessary.

The electrocardiogram is not an accurate index of the efficiency of the heart muscle. The cardiograph in our case is inadequate, but it was definitely abnormal, showing frequent changes which mostly reverted to normal. The T_1 low and inverted, the T_3 and T_4 of rather high origin, the Q wave being present and latter markedly shortened, and a QRS reported M-shaped are about all the abnormalities reported over a two-months terminal period in this case. However, if anything, they indicate an antero-septal ischaemia, apparently recent and varying in degree according to the occlusion in the coronary artery. Apparently this indicates that the heart picture was at least in part angio-spastic in nature.

The case was of two years duration, and even if partially anginal in character, must have resulted in extensive myocardial ischaemia and damage, such as infarction and sclerosis, which in itself may have caused the fatal issue.

In the final recording which terminated fatally, the picture remained essentially the same, the pain being more severe, the addition of a splitting headache and the patient dying within eight hours after entering. Strangely there is no electrocardiogram during this entire period. While as stated a cerebral accident might have been concurrent, there is no proof of this as there were no C N S signs reported. Ventricular rupture or a dissecting aneurism, rupturing into the pericardial sac, may have occurred, but there are several definite signs missing to establish such a diagnosis.

My diagnosis must therefore be coronary occlusion, due to extensive vascular pathology with myocardial infarction and sclerosis, the more recent fatal episode involving the anteroseptal area.

DR. PHILLIP E. RICE

This case seems to be so clearly one of myocardial embarrassment, with or without infarction, that I am suspicious of it. The only argument I can see against such a diagnosis would be the lack of positive electrocardiographic evidence. No sedimentation rates were recorded

but the wh' count rose to 10,000 at last admission, and there was a reduced pulse pressure: 110/90 against a former reading of 120/70. I am told that myocardial infarction can occur without electrocardiographic proof. Certainly something was seriously wrong; the patient died.

What other conditions could cause such recurrent chest pains? Pericarditis should have produced other evidence such as a friction rub, and there should have been found some underlying disease as a cause. It is true that at the last admission heart sounds were distant and the pulse pressure was low which might fit in with pericarditis with effusion. We are not told if the cardiac shadow was altered at this time. A dissecting aneurysm might also have caused this chain of events and the aching described in the left arm and jaw might have been caused by involvement of the left part of the aortic arch. However we have no history of hypertension and the patient is rather young for an aneurysm. Also one would expect the pain of aneurysm to be more in the back and of a more severe and prostrating character. Also bulging of the aorta should have been noted in chest x-rays. The pains of Angina Pectoris come on with exertion, so we can hardly call it this, since many times the pain occurred while at rest.

There is little evidence to point to the gastrointestinal tract as the site of the lesion, and the G. I. series was negative. We are told of no relation of the pain to food; only once of gaseous eructation and only once that he vomited.

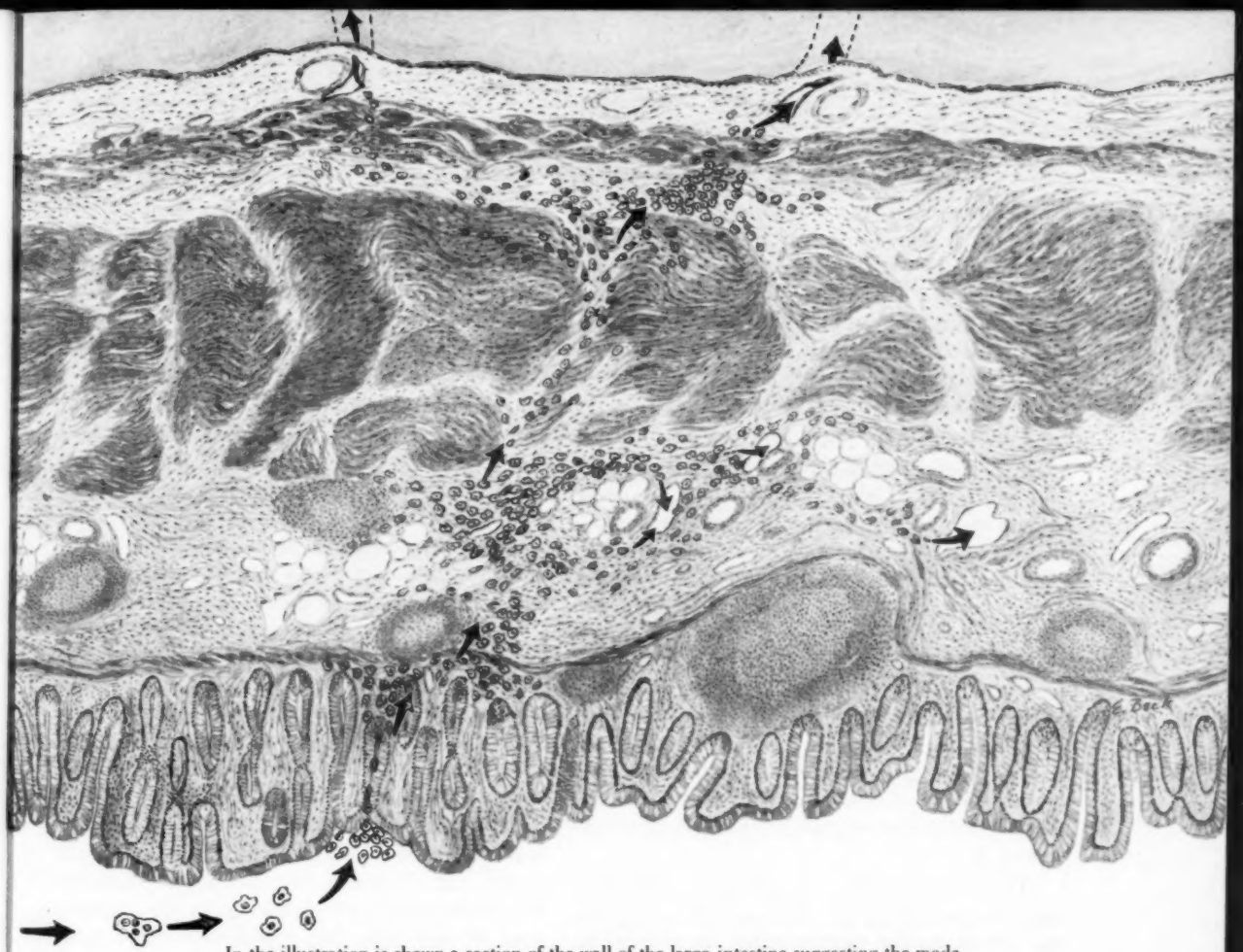
A peptic ulcer or diverticulum of the lower end of the esophogus should be considered; but we have no evidence for these conditions. Esophageal hiatus hernia has been known to cause symptoms that were sometimes hard to diagnose. The outstanding symptom here is usually dysphagia, but this occurred in only half of the cases reported. Pain is a prominent symptom and its character and location are variable. Precordial pain radiating to the shoulder and arm are reported and patients with hiatus hernia have been treated for coronary thrombosis. However, if our patient had this condition, why did he die? The only reason I can think of for a patient to die suddenly of a lesion of the lower esophagus would be from internal hemorrhage.

After considering this case, it seems that the patient probably had either a myocardial disease or a pericarditis with effusion or both. His age certainly does not exclude myocardial disease. Baker and Schillhammer report in the Armed Forces Medical Journal two cases of myocardial infarction aged 22 and 20, and review a number of other cases under 40. Strange cases of coronary involvement are sometimes seen. I well remember a 22 year old Mexican boy some years ago who, while working for the city of Glendale, was seized by a severe substernal pain with prostration and died within a few hours. Since there was a question about the Industrial angle, we had Dr. Mills do an autopsy and we found a surprising condition. An aortic vegetation, only about half centimeter in diameter, was acting as a flap obstructing the orifice of one of the coronary arteries. Fortunately, I had taken a sample of blood just before this boy's death, and it was later reported 4+. Pericarditis may give a similar pain but is more long lasting and less apt to radiate down the left arm.

Pericarditis may be a complication of rheumatic fever or tuberculosis, neither of which is suspected here, or it may be of a non-specific character, usually following an acute upper respiratory infection. Porter et al in the JAMA Oct. 28, 1950 call this latter a non-specific benign pericarditis and report cases wherein the differentiation from myocardial infarction was made; also Leslie Smith recently gave a paper on this subject. They report that pain was aggravated by respiration, cough, and chest movements, and although at times severe did not often radiate down the left arm. They found pericardial friction rub present from onset of illness and there were early fever, leukocytosis and elevated sedimentation rates. They pointed out that in myocardial infarction these signs appear later.

Of importance in the diagnosis of our case is the fact that non-specific pericarditis seems to be a benign and self-limited disease whereas our patient died. Now we might say that there was a rather rapid increase in pericardial fluid until cardiac tamponade occurred causing death—but we have no proof of this—hence I feel we must again fall back on the most obvious diagnosis, that of myocardial infarction.

This is a problem that repeatedly confronts us in medical practice. The patient presents himself with substernal pain. He says he has heart trouble — that's what brings him to the doctor. If his symptoms are characteristic and positive electrocardiographic evidence is secured, a diag-



In the illustration is shown a section of the wall of the large intestine suggesting the mode of invasion of *Endamoeba histolytica* into the various levels; the mesenteric venules lead to the liver and escape of some of the parasites may cause an amebic abscess of the liver.

Diodoquin® in Amebiasis

"Diodoquin is very effective in curing the intestinal infection...."*

In a recent survey of seven commonly-used amebacides, Weingarten* concluded that Diodoquin (diiodohydroxyquinoline, U.S.P.) gave an excellent percentage of cures with maximal safety for the patient.

The active protozoacidal agent in Diodoquin is iodine, present in the high percentage of 63.9.

As a result of this high iodine content, Diodoquin is extremely potent and, with few exceptions, a twenty-day divided dosage will destroy the offending organisms. This efficient therapeutic effect is due to the high levels of insoluble halogen acting in the lumen of the bowel. It is a well tolerated and relatively nontoxic amebacide.

Diodoquin's simplified dosage plan, three 10-grain tablets daily for twenty days, is a decided improvement for treating both the asymptomatic and symptomatic forms of amebiasis. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. Diodoquin is supplied as tablets of 10 grains (650 mg.) in bottles of 60 and 500.

*Weingarten, M.: Proctology Symposium: Amebiasis: Medical Aspects, Mod. Med. *20*:121 (May 15) 1952.

SEARLE *Research in the Service of Medicine*

nosis can be made; but if laboratory work is not confirmatory the burden of diagnosis rests on the practitioner—as it did in this case. Should his life be disrupted by treating him as a case of coronary disease, or should he be reassured and released? In which case it may become embarrassing if the patient dies.

Diagnosis: Coronary occlusion.

DIFFERENTIAL DIAGNOSIS

Dr. Conger Williams: This case concerns a man of thirty-six with a history of recurrent attacks of severe pain in the chest radiating down the left arm. He ultimately died, following one of the attacks two years after the onset of symptoms. In spite of the age of the patient the diagnosis of coronary heart disease with angina pectoris and myocardial infarction seems the best possibility. The pain was located in the left chest during the first few episodes but was later described as recurring in the substernal region. The pain of coronary insufficiency or myocardial infarction is usually located in the sternal region but may occur to the right or the left of it.

The negative findings on physical examination and electrocardiogram the day following the first attack do not include either myocardial infarction or coronary insufficiency. On admission to the hospital two weeks later, after recurrent episodes of pain in the chest and arm, the electrocardiogram was definitely abnormal, with an inverted T wave in Lead 1 and a Q wave in Lead 4. Six days later the T wave in Lead 1 was more deeply inverted. These electrocardiographic changes, especially the presence of a Q wave in Lead 4, are practically diagnostic of myocardial infarction, provided that the Q wave was of significant size. It would be helpful to see the electrocardiograms in this case, but they are not available. Apparent changes in the QRS complexes toward a more normal pattern during the first admission do not necessarily point against the diagnosis since such changes may occur with minor differences in placing of the chest electrode at the apex. Furthermore, the T wave in the apical lead may be upright in an anterior infarction, with significant changes occurring either to the right or to the left of the apex.

I believe that at the time of the first hospital admission the patient had had several episodes of coronary insufficiency and probably at least one myocardial infarction. In the interval between admission, pain was present only on effort, further evidence in support of a diagnosis of coronary heart disease. The patient died eight hours after the onset of the final episode with symptoms suggesting myocardial infarction. His sudden death can therefore be explained by the onset of ventricular fibrillation.

Another possibility that must be considered is rupture of one of the coronary arteries, with death resulting from acute pericardial tamponade. Death does not necessarily occur immediately, but may follow in several hours, depending on the size of the break. The blood-pressure change, with the low systolic pressure and a narrow pulse pressure, is consistent with such a diagnosis, but no mention was made of dyspnea or distended neck veins, although the latter finding might have been missed after admission. Myocardial rupture must also be considered, but is most unusual only eight hours after the onset of an infarction.

There are several other possibilities, but I believe that coronary heart disease with recurrent myocardial infarction and angina pectoris is the only diagnosis that fits all the findings. Dissecting aneurysm of the aorta can produce pain of this type, but repeated episodes over a period of two years are hardly in keeping with the nature of the lesion, and the absence of hypertension is against it. Syphilitic aortitis with narrowing of the mouths of the coronary arteries may produce coronary insufficiency at an early age, but it is hardly in keeping with a history of prolonged episodes of pain suggesting infarction. Furthermore, the blood Hinton test was negative. The nature of the pain does not suggest saccular aneurysm of the aorta, and negative x-ray films dispose of this suggestion.

Other possibilities that might be considered briefly are mediastinal emphysema, pneumothorax and pulmonary embolism, but there is no evidence to support any of these diagnosis. Thus, I am left with only the diagnosis of coronary heart disease. Because of the patient's age one should raise the question of a systemic disease that produced involvement of the coronary arteries as one of its manifestations. Occasionally such a condition accounts for involvement of the coronary arteries in young people. Syphilis has already been considered and rejected. Xanthomatosis is a possibility, but no mention was made of splenic or hepatic enlargement, the blood cholesterol level was not studied, and no skin

nodules were reported. Periarteritis nodosa and Buerger's disease are other conditions to be considered, but again there is no supporting evidence.

CLINICAL DIAGNOSIS

Coronary thrombosis.
Coronary heart disease.

DR. WILLIAMS' DIAGNOSIS

Coronary heart disease with myocardial infarction (? anterior).
Ruptured coronary artery with pericardial tamponade?
Angina pectoris.

ANATOMICAL DIAGNOSIS

Coronary thrombosis, recent, right.
Coronary thrombosis, old, left descending and circumflex branches.
Myocardial infarction, old.
Mycardial fibrosis.
Arteriosclerosis, marked, coronary and aortic.
Hydrothorax, slight, bilateral.
Pulmonary edema.

PATHOLOGICAL DISCUSSION

Dr. Benjamin Castleman: This patient did have severe coronary heart disease. Both main vessels were markedly atherosclerotic and calcified. There was an old thrombotic occulsion 3 cm. in length beginning a few millimeters beyond the origin of the left main coronary artery and another similar occulsion of the left circumflex branch near its origin. Most of the blood supplying the heart, therefore, must have been coming via the right coronary artery. This vessel was markedly narrowed in a few places but still patent except for one point about 4 cm. from its origin where there was a recent thrombus completely occluding the lumen. This was undoubtedly the cause of the last substernal attack that led to death. There was an old myocardial infarction involving the septum and anterior wall of the left ventricle, and scattered small foci of fibrosis in the rest of the heart, but no definite evidence of acute infarction. Eight hours is too short a period for one to be absolutely sure of changes in the myocardial fibres, and unless numerous sections were taken from various parts of the heart, a small area of acute infarction might be missed. The heart weighed only 325 gm. and was not hypertrophied. There was no hemopericardium.

The PRESIDENT'S *Page*

SUBJECT: How To Improve Press Relations. (Careful reading of this entire article is urged, and suggestions from the membership respectfully requested.)

Those who heard Mac Cahal's address at the scientific session in Tucson and who read the headlines and first few paragraphs of review in the following morning paper justifiably felt incensed at the misinterpretation of the text, the wrong use of adjectives, and the implication that the speaker "assailed" Arizona physicians, when in fact he was speaking of the causes and cures of poor public relations on a country-wide scale. Those of us who have known Mac for a number of years know that he holds the medical profession in the highest regard and is constantly working for the welfare of medicine. We understand that the reporter's headline and part of the text were altered by a night editor. Except for the flaws in this unfortunate article, Arizona Medical Association received the best coverage by Tucson newspapers in memory.

Out of this misunderstanding definite good has come. In a conference we have been told that most newspapers are interested in reporting factually correct news, and that they cannot obtain accurate medical news without cooperation. We have been told that most doctors of medicine, fearing criticism from their colleagues, are apt to clam up with a "no comment" when contacted by a reporter and that as a result only the distorted views of one side may become published. The press recognizes our individual desires for anonymity but feels frustrated (and no doubt resentful) for lack of an official source from which reasonably correct information may be obtained. One can understand how a conscientious reporter who often covers "hot" stories with a medical slant and is repeatedly brushed off with a "no comment" is apt eventually to color his reporting in a light unfavorable to the medical profession. It is a human feeling we all possess.

It is not the purpose here to encourage all-out publicity seeking by the membership. It is the purpose to inform you that more vigorous attempts will be made this year to establish cordial relations with the press. To the Public Relations Board of the Association will be assigned the task of working out formulae, including the drawing up of a code of press relations for us to follow. In order that the individual members of the Association may be protected, a proposal may result whereby the names of members of official committees authorized to speak in the name of the Association or a County Medical Society will be furnished to the newspapers. As an example, suppose the newspaper wishes information about a patient in a hospital. The paper would call a member of the proper committee who would in turn contact the attending physicians and the hospital, and would then supply as accurate information as possible to the reporter promptly. If any quotations are used, the article would state, "Dr. Doe, speaking in the name of Blank County Medical Society, says" etc.

Remember when you give information to the reporter that you have a right to ask him to read back to you the exact words he is going to quote you as having said. If you are not prepared to give a spur of the moment comment, be courteous, tell him you are busy and will call back in five minutes, and then formulate a statement which is concise and cannot be misconstrued.

The method of working out the details has been turned over to the Chairman of the Public Relations Board. Much time and thought will be required by his excellent committee, and we should not look for an immedate solution. Assist the committee in any way you can.

Edward M. Hayden, President
Arizona Medical Association

Editorial

ARIZONA MEDICINE
Journal of
ARIZONA MEDICAL ASSOCIATION, INC.

VOL. 10 JUNE, 1953 NO. 6

CONTRIBUTORS

The Editor sincerely solicits contributions of scientific articles for publication in ARIZONA MEDICINE. All such contributions are greatly appreciated. All will be given equal consideration.

Certain general rules must be followed, however, and the Editor therefore respectfully submits the following suggestions to authors and contributors:

1. Follow the general rules of good English, especially with regard to construction, diction, spelling, and punctuation.
2. Be guided by the general rules of medical writing as followed by the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. (See MEDICAL WRITING by Morris Fishbein.)
3. Be brief, even while being thorough and complete. Avoid unnecessary words. Try to limit the article to 1500 words.
4. Read and re-read the manuscript several times to correct it, especially for spelling and punctuation.
5. Submit manuscript typewritten and double-spaced.
6. Articles for publication should have been read before a controversial body, e.g., a hospital staff meeting, or a county medical society meeting.

The Editor is always ready, willing, and happy to help in any way possible.

FIREWORKS INJURIES

Not many years ago most Doctors approached this time of year with some dread and misgivings, knowing they would be called upon to treat injuries from fireworks used in Fourth of July celebrations.

They knew also that a sad proportion of these injuries would prove fatal in spite of all they could do. Slowly but surely the public has become conscious of these needless casualties and through the years has built up a program of promotion of a "Safe and Sane Fourth".

This program has employed many methods. The public has been educated in the inherent dangers of fireworks and especially when promiscuously used. The use of less dangerous types has been softly promoted.

Laws have been passed prohibiting fireworks in various states, either by prohibiting their use outright, or their possession, or their import or export in the state or discouraging their possession and use by other means. Quietly and unobtrusively is most cases, where their use has not been frankly outlawed, it has been permitted and placed under control to permit larger and more spectacular displays under controlled safety precautions and by experienced persons. This in turn has further discouraged indiscriminate home use of the less spectacular but more dangerous kind.

All this has been done so gradually, so quickly and softly that most of us have hardly realized that it was going on. As a tribute to its effectiveness, it is apropos to quote some statistics recently released by the American Medical Association.

In the United States in 1903 there were 466 fatalities and 3,983 non-fatal injuries from fireworks. In the years since there has been in general a gradual decrease in these casualties with the figures in 1916 being 30 deaths and 820 non-fatal injuries. In 1946, the last year for which records are available there were only 6 deaths and 903 non-fatal injuries. And remember that this is in spite of a very rapidly increasing population! This of course would make percentage figures even more impressive.

Yes, Doctor, here's one other reason for you to be thankful you weren't born fifty years sooner. Not only would you not have had the "wonder drugs" but you would have had more fireworks injuries to treat without them.

It behooves us to continue this great work and in every way possible promote a "safe and sane Fourth".

CHANDLER, ARIZONA SITE FOR 1954 ANNUAL MEETING

As directed by the House of Delegates in annual meeting held in Tucson, Arizona, April 28, 1953, Council at a meeting held May 24, 1953, selected Chandler, Arizona, as the site for the Sixty-Third Annual Meeting of this Association the dates: April 25 (Sunday), through April 28 (Wednesday), 1954. Headquarters will be at the San Marcos Hotel.

Tentative plans call for a meeting of Council, Sunday afternoon (April 25), followed by the Annual Corporation and Board of Directors meetings of Blue Shield. A handicap golf tournament (stag) will be scheduled for Sunday also.

The House of Delegates will meet in the morning; first session Monday, April 26, and second session Wednesday, April 28.

The President's Dinner-Dance will be held Wednesday evening, April 28. Technical exhibits will be provided for.

STATE HOSPITAL CHANGES VISITING HOURS

Dr. M. W. Conway, Director of the Arizona State Hospital, has announced the following changes in visiting hours to become effective May 1, 1953:

Saturdays, Sundays & Holidays: 10:00 to 11:00 a.m., 1:00 to 4:000 p.m.

Tuesdays, Wednesdays & Thursdays: 2:00 to 4:00 p.m.

No visiting hours Mondays and Fridays.

The new regulations will in no way interfere with the hospital policy of allowing relatives to visit critically ill patients at any time. No visitors are permitted for new patients for 2 weeks after their admission.

Dr. Conway emphasizes the fact that frequent contact with relatives and friends is important to the well-being of the patient. However, the present daily visiting hours frequently hamper the hospital's treatment program for patients. Hospital employees work 44 hours a week, of which at the present time 22 hours are allotted for visitors, which means that patients are frequently not available for treatment during one-half of a doctor's time. The additional time allowed by the reduction in visiting hours will expedite the over-all treatment program for patients and assist in their earlier recovery.

ROCKY MOUNTAIN CANCER CONFERENCE

Come to COLORFUL COLORADO for the Seventh Annual Rocky Mountain Cancer Conference held at Denver July 8 and 9.

Headquarters Shirly-Savoy Hotel. No registration fee. Banquet and entertainment, Round Table Discussions.

Guest Speakers are as follows: Wm. M. Allen, M.D. Gynecology, St. Louis, Mo.; Ralph M. Caulk, M.D., Radiology, Washington, D. C.; John W. Cline, M.D., Surgery, San Francisco, California; Henry D. Diamond, M.D., Internal Medicine, N.Y.C.; Rubin H. Flocks, M.D. Urology, Iowa City, Iowa; Cushman D. Haagensen, M.D., Surgery, N.Y.C.; Francis W. Lynch, M.D., Dermatology, Saint Paul, Minn.; and John R. McDonald, M.D., Pathology, Rochester, Minn.

For Information Write To:
ROCKY MOUNTAIN CANCER CONFERENCE
835 Republic Bldg.
Denver 2, Colorado

University of Pittsburgh School of Medicine
Department of Surgery,
Section of Anesthesiology
Announces A

POST GRADUATE SYMPOSIUM
On the
BASIC SCIENCES RELATED TO ANESTHESIOLOGY
In Co-operation with the
Departments of Anesthesiology
of the
St. Francis, Allegheny General, Mercy
Medical Center Hospitals
This course will be held June 8-12, 1953
9 A.M. to 6 P.M.
Registration Fe – $25.00
The Course Will Be Limited to
50 Participants

TOPICS OF *Current Medical* INTEREST

RX., DX., AND DRS.

By GUILLERMO OSLER, M. D.

At least three Arizonans were seen at the San Francisco sessions of the AMER. ASS'N. FOR THORACIC SURGERY. In addition, Dr. W. Dermont Melick of Phoenix was elected to associate membership; Dr. John Alexander of Michigan came up from his Tucson holiday quarters, and it is wonderfully good to see him at meetings again; Dr. W. H. Oatway, once of Tucson and now of Altadena (near Los Angeles), attended as a new active member. . . The meetings were good and well run. . . The most dramatic point was a quiet few words, spoken during a movie which showed a "mechanical lung" (extracorporeal circulation). The surgeon said, "Oh yes. At this point I should mention that lungs are collapsed and not moving. Breathing is no longer necessary" (!). . . The other most amazing phenomenon was the bathroom of one of the officers, at the Fairmont Hotel. It was located just above the Venetian Room. The ceiling, walls and floors were made of mirrors, and after 9 P. M. Hildegard and her orchestra could be heard coming up through the drains. . . Most meetings are too smooth and polite, but frankness still exists. One paper was expected to be controversial, but the speaker warily waltzed around the subject. The first discusser, a longtime member, said, "As I rose to comment on this paper, a friend next to me asked where I was going. I said 'To discuss the paper'. Said my friend, 'What the hell is there to discuss?' I agree with him."

The plasma and transfusion problem, as it concerns HOMOLOGOUS SERUM JAUNDICE in U. S. troops, is far from settled and satisfactory. . . The Armed Forces and Surgeon General report that 23 PER CENT of the severly wounded (who receive 5 to 10 units of plasma) contract hepatitis in 60 to 180 days. It is some consolation that the mortality is only 1 per 1,000. . . No good method of sterilization is available. Serum albumin is free of the virus, but is in short supply.

Two Tucson medical authors have done right well in the Annals of Internal Medicine. . . HARRY THOMPSON AND HAROLD ROWE published on 'Cortisone and Gold Therapy in Chronic Rheumatoid Arthritis'. . . They urge the concurrent use of the hormone and metal for best results. What they say makes sense, since gold is slowly effective but toxic, and cortisone is quickly effective but not permanent. . . They find that remissions can be produced quickly and completely, and that cortisone can then be discontinued with less chance of relapse.

A dermatologist, or an eye man, or even an internist might get a minor shock from a postcard announcement sent out by the Murray Baumgartner Surgical Instrument Co., Inc., of Baltimore. . . "The Berman Polyethylene tube for replacement of resected portions of the esophagus is now available for distribution. They are available in sets of six." . . . Anybody for tennis?

The 'F' antibiotics are dominant this month. Their trial has been scanty but they sound interesting. . . FURADANTIN (Eaton Labr., Inc.) is the name for nitrofurantoin, a urinary antiseptic made from nitrofuran. It can be given by mouth, has a 'broad spectrum', has scanty toxicity (some nausea), and it is said to be effective (at Wake Forest and the N. Y. College of Medicine) on many cases refractory to other drugs. . . FUMADIL (Abbott Labr.) is the other antibiotic, noted for its narrow field of action. Early reports indicate that it has no effect on bacteria, fungi, or viruses, but is very rough on the ameba E. histolytica. Kills not only the disease-bearing trophozoites but the disease-spreading cysts. They say.

BOOK-TITLE-OF-THE-MONTH—Dr. Errett Albritton of George Washington University wins the award for "Standard Values in Blood, being the first fascicle of a Handbook of Biologic Data". . . FASCICLE. It may become a fashionable word?

Our editor may consider this flattery instead of a compliment, but the risk must be taken. . . Whoever though of using a section from ARIZONA MEDICINE (containing a description and schedule for the state A.M.A. meeting) as a PROGRAM for the meeting was thinking smartly. . . It looked well, it had our journal's cover on the front, and there just may have been a financial angle involved. . . Good 'deal'.

Wagner of Washington reported at a recent A.P.H.A. meeting that Terramycin is the most effective treatment for NONSPECIFIC URETHRITIS AND PROSTATITIS. . . He stresses two points, however. The etiology of the disease is not known. Treatment is no substitute for diagnosis.

We abstracted an article last year on A TUBELESS TEST FOR ACHLORHYDRIA. It apparently looks good commercially, since Squibb now has it for sale as 'Diagnex' (Squibb quinine carbacrylic resin) . . . To summarize the method, as now used—the patient takes a dose of the resin, plus a capsule of caffeine sodium benzoate (to stimulate the gastric secretion). The patient collects a con-

NOT FOR PROFIT

THE HOSPITAL BENEFIT Bulletin

Special Published Bi-Monthly by the Hospital Benefit Association, First Street at Willetta, Phoenix June, 1953

Question QUIZ
Do you know the answers?

Q. Does the HBA Surgical Plan pay for wound repair, X-rays and treatment of fractures in the Doctor's office?

A. Yes—when as a result of an accident and if within 24 hours of the accident.

Q. Can doctors help HBA speed up payment for their fees?

A. Yes—by promptly billing the Association and by giving necessary data using standard medical nomenclature.

Q. How many Association members are there today?

A. More than 35,000.

Q. How much did the Association pay out in 1952 on hospital and surgical bills?

A. The Association paid out more than $311,000 in hospital and surgical bills for its members.

Q. What standard does the HBA use in paying surgical fees?

A. It was taken from the Arizona Industrial Commission's schedule of surgical benefits.

Q. Does the Association cooperate with doctors and hospitals?

A. Yes. The Association cooperates in every way possible. And it actively supports the standards of the medical profession.

Q. Are surgical fees paid to osteopaths by the Association?

A. No.

Q. May HBA members choose their own hospitals and doctors?

A. Yes. Member benefits are paid to any licensed hospital or physician (M.D.) anywhere in the world.

Annual Meeting Reflects HBA'S Liberal Policy Of Settling All Claims

The Hospital Benefit Association's annual meeting of members, held May 13 at the Home Office, First Street at Willetta, Phoenix, reflected the Association's liberal payment policy, its sound condition and its rapid growth during the past year.

George E. Richardson, Director, read a report from the State Insurance Department which is prescribed by law to have one of its examiners audit and check the Association's records each year. The examiner's report showed that the Association is operated in an efficient and economical manner, and that it is quite liberal in claim settlement practices.

HBA Pays $311,201

Mr. Richardson, reporting on the past year's activities, disclosed that during 1952, the Association paid $311,201.58 in hospital and surgical bills for its members.

He also pointed out that membership in the Association increased 29.24% during the last year, and that the Association's assets as of April, 1953, totaled $235,380.46. This represents a gain of $45,404 since the end of last year.

This was the Association's first meeting in its own building. And Mr. Richardson stated that the move into the Association's own building a year ago has resulted in increased efficiency and economy. He also added that the gratifying increase in membership has made it necessary to remodel the Home Office in order to get more office space.

Physicians' Use of Standard Nomenclature Avoids Paying Delay

The schedule of Surgical Benefits of the Hospital Benefit Association was taken from the schedule of the Arizona Industrial Commission.

If the physician uses the same wording as this schedule in filling out the Association's bill form, any question of eligibility is eliminated and payments can be made without delay.

However, if an operation is performed that is not listed in the schedule, the Association requests physicians to use standard medical nomenclature when their statements are submitted. This, too, will cut down on delay caused by lack of information.

"We were in the same hospital together—too bad you turned out to be a girl."

X-Rays In Doctor's Office

The HBA Surgical Plan provides for payment of X-ray examination for fractures and dislocations in the doctor's office, if examination is made within 24 hours of the accident.

TOPICS OF *Current Medical* INTEREST

RX., DX., AND DRS.

By GUILLERMO OSLER, M. D.

At least three Arizonans were seen at the San Francisco sessions of the AMER. ASS'N. FOR THORACIC SURGERY. In addition, Dr. W. Dermont Melick of Phoenix was elected to associate membership; Dr. John Alexander of Michigan came up from his Tucson holiday quarters, and it is wonderfully good to see him at meetings again; Dr. W. H. Oatway, once of Tucson and now of Altadena (near Los Angeles), attended as a new active member. . . The meetings were good and well run. . . The most dramatic point was a quiet few words, spoken during a movie which showed a "mechanical lung" (extracorporeal circulation). The surgeon said, "Oh yes. At this point I should mention that lungs are collapsed and not moving. Breathing is no longer necessary" (!). . . The other most amazing phenomenon was the bathroom of one of the officers, at the Fairmont Hotel. It was located just above the Venetian Room. The ceiling, walls and floors were made of mirrors, and after 9 P. M. Hildegard and her orchestra could be heard coming up through the drains. . . Most meetings are too smooth and polite, but frankness still exists. One paper was expected to be controversial, but the speaker warily waltzed around the subject. The first discusser, a longtime member, said, "As I rose to comment on this paper, a friend next to me asked where I was going. I said 'To discuss the paper'. Said my friend, 'What the hell is there to discuss?' I agree with him."

The plasma and transfusion problem, as it concerns HOMOLOGOUS SERUM JAUNDICE in U. S. troops, is far from settled and satisfactory. . . The Armed Forces and Surgeon General report that 23 PER CENT of the severly wounded (who receive 5 to 10 units of plasma) contract hepatitis in 60 to 180 days. It is some consolation that the mortality is only 1 per 1,000. . . No good method of sterilization is available. Serum albumin is free of the virus, but is in short supply.

Two Tucson medical authors have done right well in the Annals of Internal Medicine. . . HARRY THOMPSON AND HAROLD ROWE published on 'Cortisone and Gold Therapy in Chronic Rheumatoid Arthritis'. . . They urge the concurrent use of the hormone and metal for best results. What they say makes sense, since gold is slowly effective but toxic, and cortisone is quickly effective but not permanent. . . They find that remissions can be produced quickly and completely, and that cortisone can then be discontinued with less chance of relapse.

A dermatologist, or an eye man, or even an internist might get a minor shock from a postcard announcement sent out by the Murray Baumgartner Surgical Instrument Co., Inc., of Baltimore. . . "The Berman Polyethylene tube for replacement of resected portions of the esophagus is now available for distribution. They are available in sets of six." . . . Anybody for tennis?

The 'F' antibiotics are dominant this month. Their trial has been scanty but they sound interesting. . . FURADANTIN (Eaton Labr., Inc.) is the name for nitrofurantoin, a urinary antiseptic made from nitrofuran. It can be given by mouth, has a 'broad spectrum', has scanty toxicity (some nausea), and it is said to be effective (at Wake Forest and the N. Y. College of Medicine) on many cases refractory to other drugs. . . FUMADIL (Abbott Labr.) is the other antibiotic, noted for its narrow field of action. Early reports indicate that it has no effect on bacteria, fungi, or viruses, but is very rough on the ameba E. histolytica. Kills not only the disease-bearing trophozoites but the disease-spreading cysts. They say.

BOOK-TITLE-OF-THE-MONTH—Dr. Errett Albritton of George Washington University wins the award for "Standard Values in Blood, being the first fascicle of a Handbook of Biologic Data". . . FASCICLE. It may become a fashionable word?

Our editor may consider this flattery instead of a compliment, but the risk must be taken. . . Whoever though of using a section from ARIZONA MEDICINE (containing a description and schedule for the state A.M.A. meeting) as a PROGRAM for the meeting was thinking smartly. . . It looked well, it had our journal's cover on the front, and there just may have been a financial angle involved. . . Good 'deal'.

Wagner of Washington reported at a recent A.P.H.A. meeting that Terramycin is the most effective treatment for NONSPECIFIC URETHRITIS AND PROSTATITIS. . . He stresses two points, however. The etiology of the disease is not known. Treatment is no substitute for diagnosis.

We abstracted an article last year on A TUBELESS TEST FOR ACHLORHYDRIA. It apparently looks good commercially, since Squibb now has it for sale as 'Diagnex' (Squibb quinine carbacrylic resin) . . . To summarize the method, as now used—the patient takes a dose of the resin, plus a capsule of caffeine sodium benzoate (to stimulate the gastric secretion). The patient collects a con-

NOT FOR PROFIT

THE HOSPITAL BENEFIT Bulletin

Special Published Bi-Monthly by the Hospital Benefit Association, First Street at Willetta, Phoenix June, 1953

Question QUIZ
Do you know the answers?

Q. Does the HBA Surgical Plan pay for wound repair, X-rays and treatment of fractures in the Doctor's office?

A. Yes—when as a result of an accident and if within 24 hours of the accident.

Q. Can doctors help HBA speed up payment for their fees?

A. Yes—by promptly billing the Association and by giving necessary data using standard medical nomenclature.

Q. How many Association members are there today?

A. More than 35,000.

Q. How much did the Association pay out in 1952 on hospital and surgical bills?

A. The Association paid out more than $311,000 in hospital and surgical bills for its members.

Q. What standard does the HBA use in paying surgical fees?

A. It was taken from the Arizona Industrial Commission's schedule of surgical benefits.

Q. Does the Association cooperate with doctors and hospitals?

A. Yes. The Association cooperates in every way possible. And it actively supports the standards of the medical profession.

Q. Are surgical fees paid to osteopaths by the Association?

A. No.

Q. May HBA members choose their own hospitals and doctors?

A. Yes. Member benefits are paid to any licensed hospital or physician (M.D.) anywhere in the world.

Annual Meeting Reflects HBA'S Liberal Policy Of Settling All Claims

The Hospital Benefit Association's annual meeting of members, held May 13 at the Home Office, First Street at Willetta, Phoenix, reflected the Association's liberal payment policy, its sound condition and its rapid growth during the past year.

George E. Richardson, Director, read a report from the State Insurance Department which is prescribed by law to have one of its examiners audit and check the Association's records each year. The examiner's report showed that the Association is operated in an efficient and economical manner, and that it is quite liberal in claim settlement practices.

HBA Pays $311,201

Mr. Richardson, reporting on the past year's activities, disclosed that during 1952, the Association paid $311,201.58 in hospital and surgical bills for its members.

He also pointed out that membership in the Association increased 29.24% during the last year, and that the Association's assets as of April, 1953, totaled $235,380.46. This represents a gain of $45,404 since the end of last year.

This was the Association's first meeting in its own building. And Mr. Richardson stated that the move into the Association's own building a year ago has resulted in increased efficiency and economy. He also added that the gratifying increase in membership has made it necessary to remodel the Home Office in order to get more office space.

Physicians' Use of Standard Nomenclature Avoids Paying Delay

The schedule of Surgical Benefits of the Hospital Benefit Association was taken from the schedule of the Arizona Industrial Commission.

If the physician uses the same wording as this schedule in filling out the Association's bill form, any question of eligibility is eliminated and payments can be made without delay.

However, if an operation is performed that is not listed in the schedule, the Association requests physicians to use standard medical nomenclature when their statements are submitted. This, too, will cut down on delay caused by lack of information.

"We were in the same hospital together—too bad you turned out to be a girl."

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trol urine, and a single urine specimin 2 hours after the dose. These go to the physician, laboratory, or hospital for analysis. . . Squibb's will be glad to receive requests for information, but no specimens, please.

The Fresno (Calif.) CHEST X-RAY SURVEY must have made lots of people salivate because of its completeness. Public health officials, or any good citizen, would delight to have 85% of the population surveyed. That figure is almost as good as having a law.

A physician's knowledge of ENZYME SYSTEMS is usually not very great. Most of us would know nothing of what happens when five chemicals are combined, (adenosine triphosphate, oxygen, magnesium, luciferm, and luciferase), and that is what happens—nothing. . . When another chemical, inorganic pyrophosphate, is set free to join the group by nerve stimulation, what happens? The flash of light which is made by A FIREFLY! . . . Three Johns Hopkins workers have described the procedure, and also add that the fire is put out by rapid destruction of the pyrophosphate.

The advent of a new and relatively non-toxic DRUG FOR EPILEPSY has been noted by Carey of the Lederle Laboratories. . . They call it 'Hibicon', and it contains a new chemical nucleus not previously used for this purpose. . . It is said to be best for grande mal and psychomotor types, and has worked where others have failed. . . The chief advantage is an apparent lack of bone marrow depression.

The 'Half-Century of Progress' issue of the Arizona State Health Dep't. was a goodie. One can read it and remember some of the events, or (if you're new here) read it and wonder at the huge changes in a remote, recent Border State. . . The pamphlet will be fine source-material for those who come later but there are plenty still here who know the stories between the lines. . . It seems a far cry from a day when M.D.'s were afraid to stay away from a medical meeting because they wouldn't be there to defend themselves in one of the outspoken ruckuses, and when they often carried pistols, and when the poorest health-seekers lived in tent-colonies outside of the resort towns. . . 'Tain't long, tho.

Rowe, McKelvey, and Keith write some iconoclastic notes in the Canadian Medical Ass'n Journal. They tried out corticotropin, cortisone, or aspirin on random selected patients with RHEUMATIC FEVER. . . Certain beneficial effects were encountered in all three groups. Fever and arthritis were usually controlled by all three drugs. Relapses in fever, sed. rate and arthritis were most common in the hormone group on cessation of therapy. . . Conclusions—The salicylates are the more practical agents in rheumatic fever!

Krantz of Maryland is said (by TIME MAG.) to have a fluorinated ether (trifluorethyl vinyl ether) which promises well as AN ANAESTHETIC. It is fact-acting (30 sec.), has an agreeable odor, and is poorly combustible. . . Who will offer odds that it will not produce the usual complications of almost any new agent? The odds are high.

TIME mentions another variation on a familiar theme. We have wondered, in previous paragraphs, why the advantages of a TOXIC (EMETIC) AGENT combined with the BARBITURATES wouldn't outweigh the disadvantages. . . Now Koppanyi and Tazekas of Washington, D. C., have a 'safety factor', pentylene tetrazol. It counteracts the sedation, when the barbiturate is used in excess, and is an emetic. . . Viva!

NOTICE

ALL CONTRIBUTORS OF ARIZONA MEDICINE SHOULD HAVE THEIR MATERIAL IN THE JOURNAL OFFICE NOT LATER THAN THE 10th OF THE MONTH PRIOR TO PUBLICATION IN ORDER TO HAVE ARIZONA MEDICINE REACH ITS READERS ON OR BEFORE THE 15th OF THE MONTH.

Material arriving after that date will be published the following month.

Arizona Pharmaceutical Page

PHARMACISTS TODAY

AS WE VIEW THE PROGRESS OF EVERY BRANCH OF THE HEALTH SERVICE GROUP, WE FIND A CONTINUOUS UPGRADING OF EACH OF THE PROFESSIONS DURING THE PAST TWO OR THREE DECADES. THE ADVANCEMENT MADE BY EACH PROFESSION HAS PLACED A DEMAND ON OTHER ASSOCIATED PROFESSIONS TO KEEP IN STEP. WE, IN PHARMACY HAVE BEEN COGNIZANT OF THE RESPONSIBILITIES IMPOSED IN US.

WHEN OUR NEW PHARMACY LAW BECAME EFFECTIVE IN 1935, THE ONLY REQUIREMENT FOR THE PRACTICE OF OUR PROFESSION, IN ARIZONA, WAS FOUR YEARS OF PRACTICAL EXPERIENCE. THIS CONDITION PREVAILED FOR A PERIOD OF FIVE YEARS THEREAFTER OR UNTIL 1940. DURING THIS PERIOD ALL WHO HAD BEEN REGISTERED AS APPRENTICES, WERE GRANTED LICENSES TO PRACTICE THE PROFESSION UPON SUCCESSFULLY COMPLETING THE BOARD EXAMINATION. AFTER THAT TIME ONLY THOSE WHO PURSUED A COURSE OF INSTRUCTION LEADING TO A BACHELOR OF SCIENCE DEGREE IN PHARMACY WERE ELIGIBLE FOR LICENSURE.

THE BEGINNINGS OF PHARMACY, THEN, IN ARIZONA, WITH AN ADEQUATE BACKGROUND FOR ITS PRACTICE, APPARENTLY BEGAN IN 1940. THIS DOES NOT PRESENT A TRUE PICTURE OF OUR SITUATION THOUGH; DUE TO THE START OF WORLD WAR II, WITH THE SUBSEQUENT DEPLETION OF OUR COLLEGES BY THE ARMED FORCES. AN ACUTE SHORTAGE OF PHARMACISTS BECAME MORE AND MORE EVIDENT. FINALLY, IN 1947, THE UNIVERSITY OF ARIZONA BOARD OF REGENTS ESTABLISHED A SCHOOL OF PHARMACY. THIS SCHOOL GRADUATED ITS FIRST CLASS IN MAY, 1950. PHARMACY, IN ARIZONA, WAS FINALLY TO RECEIVE PRACTITIONERS WHO WERE ADEQUATELY TRAINED IN THE SCIENCE OF ITS PROFESSION.

THE CLASSES OF 1950, 1951 AND 1952 HAVE PROVIDED US WITH 107 GRADUATES WHO HAVE BEEN ABSORBED INTO OUR 300 PHARMACIES—GRADUATES WHO HAVE RECEIVED THE BEST OF TRAINING IN THEIR PROFESSION AND WHO ARE PREPARED TO FULFILL THE HEALTH NEEDS OF THEIR COMMUNITIES. THIS YEAR WE SHALL HAVE AN ADDITIONAL 25 GRADUATES FROM OUR COLLEGE OF PHARMACY. GRADUATION, HOWEVER, IS NOT THE ONLY REQUIREMENT OF PHARMACISTS IN THIS STATE.

IN 1948 THE ARIZONA BOARD OF PHARMACY ADOPTED A COMPREHENSIVE INTERN TRAINING PROGRAM FOR GRADUATES, PROVIDING FOR NOT LESS THAN 52 WEEKS OF INTERN TRAINING IN A PHARMACY APPROVED BY THE BOARD. THIS TRAINING IS RIGIDLY SUPERVISED AND ITS SCOPE IS BROAD. TO BE ELIGIBLE FOR THE BOARD EXAMINATIONS, AN INTERN MUST HAVE NOT LESS THAN 26 WEEKS TRAINING SUBSEQUENT TO GRADUATION FROM A COLLEGE OF PHARMACY AND, IN NO INSTANCE, MAY HE ACQUIRE ANY TRAINING PRIOR TO THE COMPLETION OF TWO YEARS IN THE COLLEGE.

TWO YEARS AGO OUR COLLEGE OF PHARMACY ADDED TO ITS PROGRAM ONE YEAR OF PRE-PROFESSIONAL TRAINING AS A REQUISITE FOR ENTRANCE TO THE COLLEGE. WE SHALL HAVE OUR FIRST CLASS UNDER THIS EXPANDED PROGRAM GRADUATING IN THE SPRING OF 1956. THIS PRE-PROFESSIONAL YEAR REQUIRES THE COMPLETION OF NOT LESS THAN 32 UNITS OF COLLEGE WORK IN ENGLISH, CHEMISTRY, MATHEMATICS, ZOOLOGY AND BOTANY WITH AN ACCUMULATED GRADE AVERAGE OF NOT LESS THAN 3.0000 OR BETTER.

PHARMACISTS TODAY ARE THEN REQUIRED TO HAVE ONE PRE-PROFESSIONAL YEAR, FOUR YEARS IN THE PROFESSIONAL SCHOOL AND ONE YEAR OF INTERN TRAINING BEFORE THEY BECOME ELIGIBLE TO DO THE WORK YOU AND THE MEMBERS OF OTHER HEALTH PROFESSIONS REQUIRE OF THEM. THEY ARE BECOMING INCREASINGLY ABLE TO HANDLE THE PROBLEMS DEALING WITH THE DISPENSING OF DRUGS AND MEDICINES.

WHERE THERE'S BLOOD, THERE'S LIFE!

You can be sure . . . where's there's life, there's blood! While you've got your gallon and a half of blood circulating through your body, it doesn't always seem too important to share just a small part of it to help save someone else's life. As a matter of fact, your own life could well depend on having a couple pints of blood tomorrow, next week or perhaps next year. If you do need a pint of life, you'll want it quick and ready at hand . . . without fail or waiting.

Most people want it that way, too . . . strongly enough to donate their blood on a regular schedule, several times a year. These are the people who are protecting your life. They expect the same protection from you . . . from the blood that YOU donate. Your blood also makes possible the production of derivatives such as plasma, serum albumin and gamma globulin. IT ALL MEANS LIFE, NOT ONLY TO YOU AND YOUR FAMILY, BUT TO THOUSANDS OF PEOPLE ALL OVER THE COUNTRY.

The future of American freedom and well-being depends on everyone sharing in the vital job of providing adequate supplies of blood. We must save lives of our wounded fighting men, provide for everyday civilian needs, and build a reserve for civil defense use in case of attack. Over 5,000,000 pints are needed this year alone. THIS IS A JOB FOR REAL RED-BLOODED AMERICANS.

BLUE CROSS & BLUE SHIELD ANNUAL MEETINGS

Charles McCarty, Tucson attorney, was elected president of the board of directors of Associated Hospital Service of Arizona, this state's Blue Cross Plan, at its annual meeting. McCarty succeeds Preston T. Brown, M.D., Phoenix, who has served as president of the board the past two years. Other new officers are: Harry Rosenzweig, Phoenix businessman, who replaces McCarty as vice-president; K. M. Hall, Mesa banker, who becomes treasurer in place of Glenn C. Taylor, and Guy Hanner, Superintendent, Good Samaritan Hospital, Phoenix, who replaces Lloyd Swasey, M.D., Phoenix, secretary.

Dr. Brown, Taylor, W. J. Wasson and Jesse Hamer, M.D., leave the board of directors after serving on it since the inception of the plan in late 1944. Also retiring from the board after 6 years of service is A. S. Gibbons, Prescott.

Re-elected to the board were Frank Gurley, Mesa, and Harry Southworth, M.D., Prescott. New members added to the board are: M. O. Best, Phoenix, Nicholas Dragon, Phoenix, H. C. Lawrence, M.D., Phoenix, Hayes Caldwell, M.D., Phoenix, and M. G. Wolfers, Tucson, who will fill the unexpired term of William Weeks, formerly of Tucson. Hall was also elected to the board.

Remaining on the Blue Cross board are: E. L. Burrill, Prescott, Sister Mary Eucharia, Phoenix, C. H. Gans, M.D., Morenci, Sister Agnes Mary, Tucson, Newell Stewart, Phoenix, James Bennett, Tucson, Fred Porter, Jr., Phoenix, H. D. Cogswell, M.D., Tucson, Lloyd Swasey, M.D., Phoenix.

BLUE SHIELD ELECTION OF OFFICERS

All officers of Arizona Blue Shield were re-elected at the annual Blue Shield Corporation meeting, held April 26th in Tucson at the Pioneer Hotel in conjunction with the annual Arizona Medical Association convention.

Dr. David C. James, Phoenix, was elected for a second term as president, with Dr. Royal Rudolph, Tucson, vice-president, Earle Barrows, Phoenix banker, treasurer, and Dr. Zeph Campbell, Phoenix, secretary. Robert McFarland, Phoenix board member, is the fifth member of the Blue Shield executive committee.

The following were re-elected to the board of directors: A. W. Liddell, John Babbitt, John Durkin, Dr. Robert Hastings, Dr. Donald Polson, Dr. Virgil Toland, Dr. Florence Yount. Newly added to the board were: Dr. Sebastian R. Caniglia, Dr. G. Robert Barfoot, and Dr. Frederick W. Knight. These three doctors replaced Dr. Robert Cummings, Dr. O. E. Utzinger and Dr. A. I. Podolsky, whose terms expired.

Dr. John J. McLoone was elected to serve a three year term on the professional committee, replacing Dr. Joseph M. Greer, whose term of office was completed with this meeting. Other members of the professional committee are: Dr. Kenneth B. Brilhart, Dr. Clarence B. Warrenburg, Dr. Robert E. Hastings, Dr. Wallace A. Reed, Dr. Paul L. Singer, Dr. Karl S. Harris.

THE AMERICAN SOCIETY OF X-RAY TECHNICIANS

FIRST INTERNATIONAL CONVENTION OF X-RAY TECHNICIANS

Royal York Hotel, Toronto, Canada
June 28 thru July 2, 1953

Sponsored jointly by:
The Canadian Society of Radiological Technicians and
The American Society of X-Ray Technicians

Refresher Courses are offered for two hours each morning. Eight courses will be presented, four by Canadian and four by American instructors. These courses are offered for beginners as well as advanced technicians. Contact Beatrice Hurley, R.T., Registrar, St. Catherine Hospital, East Chicago, Ind., for additional information and advanced enrollment.

The afternoon sessions will be devoted to joint sessions of the CSRT and ASXT at which time technical papers and assays will be presented by technicians of both societies and by distinguished radiologists on invitation.

Two Memorial Lecturers:

1. Canadan—*Welch Memorial Lecture* by E. A. Petrie, M.D., Director, Department of Radiology, St. Joseph's Hospital, St. John, New Brunswick, Canada.

2. American—*Jerman Memorial Lecture* by Russell H. Morgan, M.D., Professor of Radiology, The Johns Hopkins University, Baltimore, Maryland.

One need not be a member of either of these sponsoring organizations to enjoy the activities of the FIRST INTERNATIONAL. Guest badges are available which will allow anyone to join convention activities and array of social functions.

ARIZONA ASSOCIATION OF NURSING HOMES

The Association of Nursing Homes organized April 13, 1953, in Phoenix. The A.A.N.H. is an institutional group, whose members are obligating themselves to operate morally and ethically in the best interests of health, sanitation, medicine, and humanity.

Evelyn Dodd is secretary of the Association.

Woman's AUXILIARY

Left to right: Mrs. B. P. Storts, President-Elect, Tucson; Mrs. Theodore Heinz, Western Regional Chairman and Second Vice-President National Auxiliary; Mrs. George S. Enfield, President, Phoenix and Mrs. Roy Hewitt, First Vice-President, Tucson.

CONVENTION

The twenty-third annual convention of the Woman's Auxiliary to the Arizona Medical Association convened in Tucson, April 27 and 28, with the registration of 133 members. Conventions are always times to renew old acquaintances, make new friends, and learn what your State Auxiliary has accomplished during the past year. This year the keynote of the convention seemed to be the graciousness and friendliness of all who attended.

The first event of the convention was a brunch held at the Santa Rita Hotel which was attended by ninety women. The decorations of small individual nosegays for each person started the convention off with a gay and festive note. The annual session was called to order at noon by Mrs. W. F. Schoffman, president, who welcomed members of the auxiliary and guests. Our very special guest was Mrs. Theodore Heinz, 2nd Vice-President of the Woman's Auxiliary to the American Medical Association. Reports of the officers and the board were read which showed the splendid work done by these state officers during the past year. This year it seemed the outstanding work was done in nurse recruitment. In most of the auxiliaries films on nursing were shown, pamphlets distributed to schools and future nurse's clubs, and teas and conducted hospital tours were arranged for girls interested in this profession. Doctors' wives were found working in many volunteer service groups throught the state. They also gave financial aid through their local county auxiliaries. The State Auxiliary gave $50.00 to the American Medical Educational fund. A very amusing skit entitled "The Doctor's Wife" was presented to the members at the brunch by the Pima County Auxiliary.

The second general session of the convention was called to order at 9:00 A. M. and despite the early hour it was well attended. The reports of the county presidents were read, and we heard of the outstanding work of the individual auxiliaries. Arizona has 408 auxiliary members in seven organized counties 18 members-at-large, for a total of 426 paid members. This is an increase of 32 over last year. Orchids go to Yavapai County which raised the sum of $5935.60 for the benefit of the Prescott Community Hospital, and to Graham County which donated $75.00 to the American Medical Education Fund. The money was raised by selling paper orchids made by the members to the visiting doctors at the General Practitioners Assembly held in Safford.

Mrs. Theodore Heinz installed the new officers who had been elected the previous day. They were:

President—Mrs. George S. Enfield
Pres.-Elect—Mrs. Brick P. Storts
1st V. P.—Mrs. Roy Hewitt
2nd V. P.—Mrs. Charles S. Powell
Treasurer—Mrs. R. Lee Foster
Rec. Sec.—Mrs. Louis Hirsch
Cor. Sec.—Mrs. William F. Schoffman
Directors:
(1 year)—Mrs. T. C. Harper, Mrs. William F Schoffman
(2 years)—Mrs. Frederick W. Knight

Mrs. Schoffman then presented the Auxiliary with a pin designed by Kenneth Begay of hand made Arizona silver in the shape of the state and engraved with A.M.A. The pin is to be worn by the President during her term of office and then handed down to her successor. Mrs. Schoffman presented the pin to Mrs. Enfield who then gave her inaugural address which will be printed in the news letter.

A luncheon honoring the national representative, Mrs. Theodore E. Heinz, was held at the Elk's Club. One hundred and six members attended. Mrs. Heinz gave us a brief talk on the role of the individual doctor's wife. Her presence at the convention was indeed inspiring to us.

That evening the cocktail party and dinner dance was a gay and happy close to two busy days. Those of us who attended the convention had a wonderful time, and we urge all to attend next year. We went home with a better understanding of the accomplishments of the State Auxiliary. We can be rightfully proud of the privilege of membership pin the Woman's Auxiliary to the Arizona Medical Association.

Mrs. Louis Hirsch
Tucson, Arizona

SUPPLEMENT TO A. M. A. FILM CATALOG NOW AVAILABLE

The A.M.A. Committee on Medical Motion Pictures has announced the publication of a supplement to the list of films available through the motion picture library. This supplement includes 12 motion pictures added to the library since publication of the December 1, 1952 catalog. Copies may be obtained by writing to the committee on Medical Motion Pictures, American Medical Association, 535 North Dearborn, Chicago 10, Illinois.

INTERESTING TOPICS

Bronchogenic Carcinoma and Tuberculosis

Since the teaching of Rokitansky nearly a hundred years ago (1855) that tuberculosis and cancer in general are antagonistic, there has been a gradual change of viewpoint to that of Fried who, in 1935, wrote on "Bronchogenic Cancer Combined with Tuberculosis of the Lungs" (Am. Jour. Cancer, 23:247, 1935). This whole subject has been recently reviewed by Nuessle (Diseases of the Chest, Feb. 1953), who gleaned from the literature reports on 1,335 cases of bronchogenic carcinoma, 85 (6.4%) of whom also had active tuberculosis. The 34 cases reported by Fried are in this tabulation. Fried stated that three explanations are tenable; the disease as associated coincidentally; tuberculosis is a factor in producing bronchogenic carcinoma; or bronchogenic carcinoma activates a pre-existing pulmonary tuberculosis. The possible co-existence of the two diseases will need to be kept in mind, when the matter of differentiating between them on the basis of X-ray findings or clinical symptoms becomes a problem. W.W.W.

RECENT GOOD ARTICLES RECOMMENDED FOR YOUR PERUSAL

(Journals in the County Medical Society Library)

Certain Radiologic Aspects of Abdominal Pain in Children by Carroll Z. Berman, Departments of Radiology and Pediatrics, Boston Floating Hospital. In the Nebraska State Medical Journal, January, 1953. Illustrated by many excellent roentgenograms.

Geriatrics in General Practice. Maryland State Medical Journ., December, 1952. Wingate M. Johnson, M. D., Professor of Clinical Medicine, School of Medicine of Wake Forest College of Medicine, Winston-Salem, N.C. The Trimble Lecture before the Semi-annual meeting of the Medical and Chirurgical Faculty of the State of Maryland, Sept. 12, 1952. A very excellent treatise of the subject.

Granuloma of the Nose and Periarterits Nodosa. Stratton et als, British Medical Journal, Jan. 17, 1953. Some nice histopathologic illustrations.

Malignant Melanoma of the Eye, by Albert C. Esposito, M.D., F.A.C.S., F.I.C.S., The W. Va.

Medical Journal, March, 1953. History of eight cases, and good review of literature.

Diagnosis of Appendicitis, by Paul Williamson, M.D., Memphis, Tenn. The W. Va. Med. Jour., March, 1953. An excellent and practical article on an old subject but with some good new points of interest.

Pharmacologic Aspects of Adrenocortial Steroids and ACTH in Man. By George W. Thorn, M.D., and Associates, Boston. A series of articles still running in the issue of Feb. 19, 1953 of the New England Journal of Medicine. Reporting on researches carried on by this group of men, under grants from several pharmaceutical manufacturers, the USPHS and National Institutes of Health.

Gastro-enteritis in General Practice. By W. J. Smither, M.D., D.P.H., British Med. Jour., Feb. 14, 1953. "Arguments are advanced for the belief that staphylococcal food-poisoning is the commonest cause of mild cases of gastro-enteritis." Worth reading.

Early and Late Complications of Head Injuries. By Walter D. Abbott, Des Moines, Ia., Journ. of Iowa State Med. Soc., March, 1953.

"The majority of patients suffering from head injuries will recover with adequate therapy, but a keener recognition of complications will be rewarded with lower mortality." Various complications are discused.

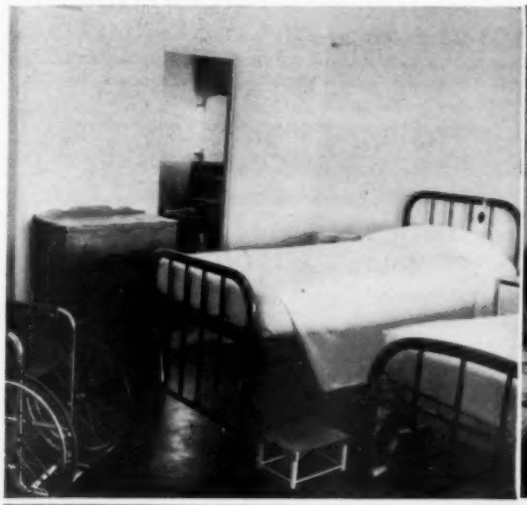
The Acne Problem. By Roy L. Kile, M.D., Cincinnati, O. The Ohio State Med. Journ., February 1953. "Not an all inclusive summary, but merely points out some of the salient features of a common disease." One of the commonest of all diseases is acne vulgaris. Fifty per cent of all skin diseases must be handled by the general practitioners. This article will be helpful to them.

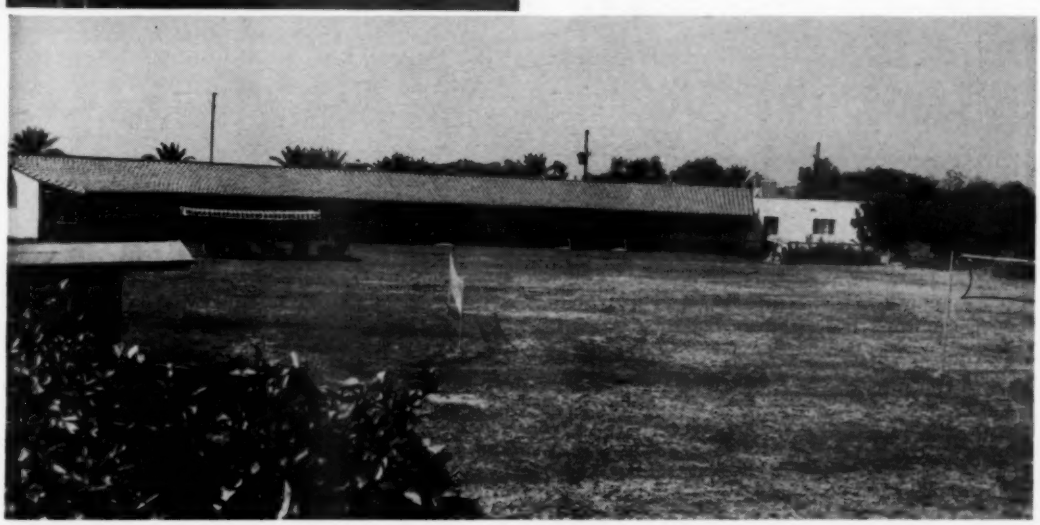
Pneumothorax and Altitude Changes

It is quite commonly believed by doctors and patients that airplane flights are dangerous to patients with pneumothorax. To settle this point, a series of observations were carried out by Cabot Brown of San Francisco, reported in Diseases of the Chest, Feb. 1953, using pressure chambers. He learned that "ten patients with assorted forms of permanent and temporary collapse were able to tolerate altitudes of 10,000 feet without discomfort or significant symptoms. Also that ambulatory pneumotherapy patients who are free of dyspnea at sea-level may fly without restriction and without oxygen in modern pressurized airplanes. W.W.W.

LABORATORIES

SANATORIUM DIRECTORY





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